

Victoria  
done!  
(NO ACTION)  
-SB

**From:** SC / VI (INFC)  
**Sent:** March 7, 2019 11:59 AM  
**To:** Jacques van Campen  
**Subject:** Smart Cities Challenge - Successful Final Proposal Submission

Dear Jacques,

Congratulations! Your submission is ready to move onto evaluation following a completeness check (per the latest FAQs).

Thank you for your cooperation, patience, and hard work, especially during the past eight months. We are truly honoured to have worked with you and wish you the best of luck in the competition!

On a related matter, we have recently determined that it will not be feasible to post final proposals on the Infrastructure Canada website in a timely manner. Instead, we will take an approach similar to the application stage and publish your executive summary in both official languages on the Infrastructure Canada website with a link to the final proposal on your website. We understand that posting the final proposal on your website is not a requirement contained in the finalist guide so we appreciate your cooperation in facilitating access to your final proposal in an open and transparent way. Please note that the accessibility materials you have prepared for your final proposal will still be helpful in preparing various communications products to promote and share knowledge of your work.

Once you have posted your final proposal on your website, please send us the link if you haven't done so already. If you anticipate that you will be unable to post your final proposal on your website within two weeks, please let us know.

As always, we are happy to answer any questions. The best way to reach us going forward would be at our generic account: [infc.sc-vi.infc@canada.ca](mailto:infc.sc-vi.infc@canada.ca).

Thank you.

**Smart Cities Challenge Team**  
Infrastructure Canada  
[infc.sc-vi.infc@canada.ca](mailto:infc.sc-vi.infc@canada.ca)



**Beute, Shantel (INFC)**

**From:** Veronica Plihal <office@southislandprosperity.ca>  
**Sent:** March 5, 2019 7:15 PM  
**To:** SC / VI (INFC)  
**Cc:** smartcitiescanada@gmail.com  
**Subject:** Final Proposal - Greater Victoria

Dear Infrastructure Canada,

We are pleased to submit our final proposal to the Canada Smart Cities Challenge on behalf of Greater Victoria. Please find the [link to our Google Drive submission folder](#), which includes the following documents:

- Smart Cities Challenge final proposal
- Smart Cities Challenge video
- Appendices
  1. Appendix 1: Finance Chapter
  2. Appendix 2: Privacy Impact Assessment
  3. Appendix 3: Letters of Support
  4. Appendix 4: Confidential Annex
- Web accessibility documents
  1. Video transcript
  2. Proposal photo, table, and figure descriptions

Please let us know if you are unable to view any of these attachments. You will also find the [link to our video here](#).

Our point of contact is Jacques van Campen [REDACTED] If Jacques is unavailable, the point of contact will be Dallas Gislason [REDACTED] If Dallas is unavailable, please contact Veronica Plihal ([office@southislandprosperity.ca](mailto:office@southislandprosperity.ca)) [REDACTED]

Kind Regards,

Veronica Plihal [REDACTED]

**SOUTH ISLAND PROSPERITY PROJECT**

Greater Victoria's Economic Development Partnership

778-265-8128 [REDACTED]

[www.southislandprosperity.ca](http://www.southislandprosperity.ca)

## COMPLETE CHECK FOR FINAL PROPOSAL

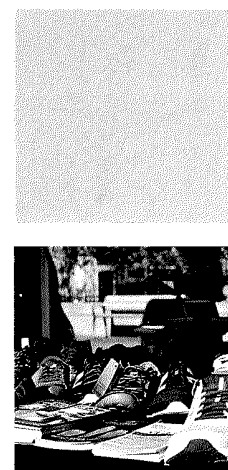
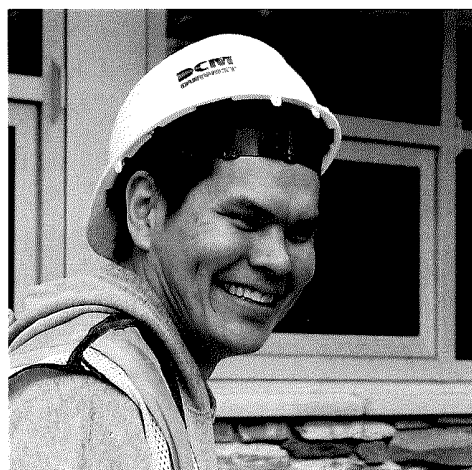
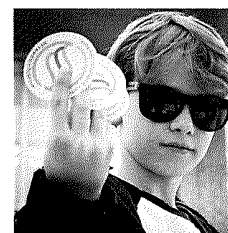
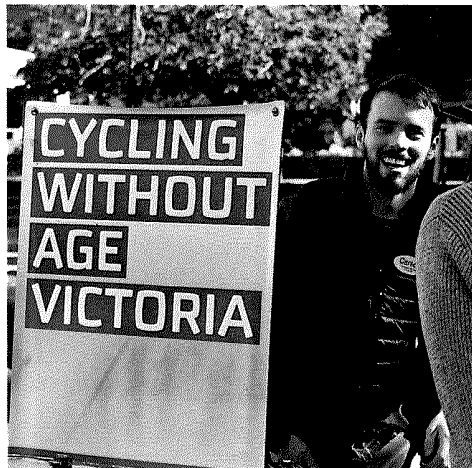
<b>FINALIST:</b> Greater Victoria				
<b>ASSESSED BY:</b> Alex Long				
<b>VALIDATED BY:</b> Amanda Aizlewood				
<b>APPROVAL BY:</b> <i>select one: Jenny Tremblay / Eric Poirier</i>				
<b>DATE OF COMPLETION:</b> <i>enter date when all completed boxes are checked</i>				
REQUIREMENTS	COMPLETED	IF NOT COMPLETED, NOTE REASON	GUIDING PRINCIPLES	ACTIONS
<b>SUBMISSION</b>				
Submitted to <a href="mailto:infc.sc-vi.infc@canada.ca">infc.sc-vi.infc@canada.ca</a> by 23:59 PST on March 5, 2019	<input checked="" type="checkbox"/>		<ul style="list-style-type: none"> <li>No extensions will be granted</li> <li>No exceptions will be made for lateness or technical problems (finalist must be able to show evidence of submission)</li> </ul>	<ul style="list-style-type: none"> <li># to contact finalist</li> <li>If not resolved, # to flag to DG for decision</li> </ul>
Final proposal is submitted	<input checked="" type="checkbox"/>		<ul style="list-style-type: none"> <li>No extensions will be granted</li> <li>There is flexibility on the finalist video until the end of the week</li> </ul>	<ul style="list-style-type: none"> <li>Assessor to save everything in designated folders</li> <li># to contact finalist if anything is missing</li> <li>If not resolved, # to flag to DG for decision</li> </ul>
Finalist video is submitted	<input checked="" type="checkbox"/>		<ul style="list-style-type: none"> <li>There is flexibility on the finalist video until the end of the week</li> </ul>	<ul style="list-style-type: none"> <li>Assessor to save everything in designated folders</li> <li># to contact finalist if anything is missing</li> <li>If not resolved, # to flag to DG for decision</li> </ul>
Preliminary Privacy Impact Assessment or Preliminary Rationale Analysis	<input checked="" type="checkbox"/>		<ul style="list-style-type: none"> <li>No extensions will be granted</li> </ul>	<ul style="list-style-type: none"> <li>Assessor to save everything in designated folders</li> <li># to contact finalist if anything is missing</li> <li>If not resolved, # to flag to DG for decision</li> </ul>
<b>FINAL PROPOSAL</b>				
Written in one of Canada's official languages	<input checked="" type="checkbox"/>		<ul style="list-style-type: none"> <li>If the final proposal is submitted in a language other than English or French, a companion version in English or French is required from the finalist</li> </ul>	<ul style="list-style-type: none"> <li># to extract the executive summary from the final proposal and send it to translation (if a French final proposal, send the entire document to translation)</li> </ul>
Generally readable (e.g. picture is not covering text, text are not overlapping)	<input checked="" type="checkbox"/>		<ul style="list-style-type: none"> <li>If there are serious formatting issues that hinders readability, the finalist may need to resubmit</li> </ul>	<ul style="list-style-type: none"> <li># to do a scan of the final proposal and verify that all text and tables, graph, etc. could be read</li> </ul>
Text-based and in either MS Word (.doc or .docx) or a fully readable, searchable, and selectable PDF (.pdf) format	<input checked="" type="checkbox"/>		<ul style="list-style-type: none"> <li>Finalist may adjust the format for INFC posting purposes after the deadline</li> </ul>	<ul style="list-style-type: none"> <li># to verify with Comms if format is suitable for posting, given INFC web accessibility standards</li> <li>If not suitable, # to contact finalist</li> </ul>
No longer than 75 pages* (Financial chapter exempted) and in 12 point font	<input checked="" type="checkbox"/>		<ul style="list-style-type: none"> <li>Finalist cannot adjust content after the deadline</li> <li>If the text overall is smaller than 12 point font, INFC will adjust and evaluate within the new page count</li> </ul>	<ul style="list-style-type: none"> <li># to notify finalist if final proposal is over 75 pages</li> <li># to notify finalist if INFC had to adjust the font and page count</li> </ul>

Contains an executive summary	<input checked="" type="checkbox"/>			<ul style="list-style-type: none"> <li># to QC and save translated version into the designated folder</li> </ul>
Organized by these distinct chapters (not limited to these; not necessarily in the same order): <ul style="list-style-type: none"> <li>Vision</li> <li>Performance measurement</li> <li>Project management</li> <li>Technology</li> <li>Governance</li> <li>Engagement</li> <li>Data and privacy</li> <li>Financial</li> <li>Implementation phase requirements</li> </ul>	<input checked="" type="checkbox"/>		<ul style="list-style-type: none"> <li>Finalist must have these chapters</li> <li>Finalist can have more chapters</li> <li>Finalist can change the order of the chapters</li> </ul>	<ul style="list-style-type: none"> <li>If the chapters are not clearly labeled, # to do a light analysis of where the content may be and make a note for the Jury</li> </ul>
<b>FINALIST VIDEO</b>				
No longer than five minutes	<input type="checkbox"/>	6.12 minutes	<ul style="list-style-type: none"> <li>Finalist may cut down the time for INFC posting purposes after the deadline</li> </ul>	<ul style="list-style-type: none"> <li># to notify finalist if video is longer than five minutes and needs cutting down</li> </ul>
Submitted as a file or in a downloadable format	<input checked="" type="checkbox"/>		<ul style="list-style-type: none"> <li>Finalist may adjust the format for INFC posting purposes after the deadline</li> </ul>	<ul style="list-style-type: none"> <li># to verify with Comms if format is suitable for posting, given INFC web accessibility standards</li> <li>If not suitable, # to contact finalist</li> </ul>
<b>CONFIDENTIAL ANNEX (OPTIONAL)</b>				
Submitted if and only if required	<input checked="" type="checkbox"/>	Outlines partners' contribution		<ul style="list-style-type: none"> <li># to flag with DG if confidential annex is lengthy</li> </ul>



# Reimagining Our Shared Mobility Future

March 2019



SOUTH ISLAND  
**PROSPERITY  
PARTNERSHIP**





# Table of Contents

<b>Glossary of Key Terms</b>	3	4.5 Engagement methodologies	37
<b>Executive Summary</b>	4	4.6 Diversity and inclusion framework	38
Reimagining our shared mobility future	4	4.7 Risk mitigation	39
Solving critical challenges	5	<b>CHAPTER 5 - Data and Privacy</b>	40
A culture of collaboration	6	5.1 Data and our projects	40
Why should we win?	6	5.2 Data and privacy plan	43
Outcomes-focused implementation	7	5.3 Risk mitigation	47
Proposal preview	8	<b>CHAPTER 6 - Project Management</b>	48
Conclusion	8	6.1 Introduction and approach	48
<b>CHAPTER 1 - Vision</b>	9	6.2 Scope, schedule, sequencing and dependencies	50
1.1 Greater Victoria at a crossroads	9	6.3 Resourcing	52
1.2 A shared vision for smart mobility	9	6.4 Stakeholders	54
1.3 Our Smart Mobility Program	10	6.5 Procurement plan	54
1.4 Bringing "Citizen-Inspired Transformation" to life	11	6.6 Communications	55
1.5 Co-design target groups	11	6.7 Sustaining projects beyond the Challenge	56
1.6 Why should we win?	14	6.8 Risk mitigation	56
<b>CHAPTER 2 - Technology</b>	16	<b>CHAPTER 7 - Performance Measurement</b>	58
2.1 Technology plan for our SMP	16	7.1 Outcomes-based performance measurement framework	58
2.2 Future-proofing and scalability	23	7.2 Risk mitigation	66
2.3 Compliance and standards	24	<b>CHAPTER 8 - Implementation Phase Requirements</b>	67
2.4 Technology partners	24	8.1 Reporting and legal requirements	67
2.5 Inclusivity and accessibility	24	8.2 Risk mitigation	69
2.6 Risk mitigation	25	8.3 Freedom to move: from vision to implementation	70
<b>CHAPTER 3 - Governance</b>	26	<b>APPENDICES</b>	
3.1 Introduction	26	Appendix 1 — Finance	
3.2 Governance framework	26	Appendix 2 — Privacy Impact Assessment	
3.3 Looking to the future	31	Appendix 3 — Letters of support	
3.4 Risk mitigation	31	Appendix 4 — Confidential Annex	
<b>CHAPTER 4 - Engagement</b>	32		
4.1 Introduction	32		
4.2 SIPP engagement approach	32		
4.3 Engagement to date	33		
4.4 Engagement plan for implementation phase	36		

We are grateful to be doing our work on the territories of the Coast Salish and Nuu-chah-nulth peoples, known today as Lkwungen peoples (Esquimalt and Songhees Nations), WSÁNEĆ Nation (consisting of STÁUTW—Tsawout, BOKEĆEN — Pauquachin, W JOLELP — Tsartlip, and WSIKEM — Tseycum Nations), Sc'ianew Nation (Beecher Bay), T'Sou-ke Nation, and Pacheedaht Nation. We respect and, in partnership, build on the traditional knowledge of the Indigenous peoples who have thrived and prospered in the South Island for millennia.

# Glossary of Key Terms

## Co-design target groups:

The three priority populations for the Smart Mobility Program

- Seniors
- Indigenous students
- New employees

## Indigenous Smart Mobility Pilot:

Mobility as a Service pilot project for Indigenous students

## Initial proposal:

SIPP's first submission to the Smart Cities challenge

## Mobility Wellness Index (MWI):

A unique performance tool SIPP developed to measure impacts on people's physical, emotional and financial wellness resulting from mobility improvements

## Program Management Office (PMO):

The entity charged with managing the Smart Mobility Program

## Scaled Agile Framework (SAFe):

Project management model adopted for delivering the Smart Mobility Program

## Smart Mobility Program (SMP):

Overarching program comprising our three projects

- Project 1: Integrated Mobility as a Service (MaaS)
- Project 2: Smart Trip Planning and Single Payment Platform (STP)
- Project 3: Smart South Island Inspiration Centre (SSIIC)

## South Island Prosperity Partnership (SIPP):

A private not-for-profit organization that serves as the economic body for Greater Victoria and the entity submitting this Smart Cities Challenge application

## Stage Gates:

Project phases, defined by key milestones in program delivery and evaluation

- Stage Gate 1: Minimum Viable Product / Pilot
- Stage Gate 2: Iterative Development
- Stage Gate 3: Rollout
- Stage Gate 4: Operate and Scale (post-SCC)

## Acronyms:

**API:** Application Programming Interface

**CIO:** Chief Information Officer

**CTO:** Chief Technology Officer

**KPI:** Key Performance Indicator

**MaaS:** Mobility as a Service

**MFA:** Multifactor Authentication

**MWI:** Mobility Wellness Index

**MVP:** Minimal Viable Product

**NFP:** Not-for-Profit organization

**P3:** Public-Private Partnership

**PII:** Personally Identifiable Information

**PIPA:** Personal Information Privacy Act

**PMO:** Program Management Office

**SAFe:** Scaled Agile Framework

**SCC:** Smart Cities Challenge

**SIPP:** South Island Prosperity Partnership

**SMP:** Smart Mobility Program

**STP:** Smart Trip Planning and Single Payment Platform

**SSIIC:** Smart South Island Inspiration Centre



# Executive Summary

## Canada's Smart Cities Challenge



Aerial view of Fort Street and Cook Street, Victoria

Greater Victoria is proud to be united behind a vision for a new, shared mobility future that is convenient, green, affordable, inclusive and improves the prosperity and wellbeing of its citizens. Our vision will be achieved by using smart city technologies, but also by bringing our tagline “Citizen-Inspired Transformation” to life, so that our communities and many others across Canada can realize the benefits of improved mobility.

We are grateful for the support and contributions of our 117 partners, including 13 funding partners, six program partners, 14 funded development and research partners and 84 collaborative partners. This proposal has—without a doubt—been made infinitely better through their participation and involvement. Our momentum and collective will to solve our pressing mobility challenges has never been stronger.

With our rich array of partners, our governance model, our commitment to outcomes that matter to our citizens, and our measured implementation approach, we will not only ensure that our projects are well-executed but also that they are meaningful and transformative to our region and Canada.

It is with pleasure that the South Island Prosperity Partnership (SIPP) shares its vision and implementation plan for a Smart Mobility Program (SMP) in the forthcoming chapters.

### REIMAGINING OUR SHARED MOBILITY FUTURE

Through Canada’s Smart Cities Challenge, we will showcase how smart mobility can be a local and global model—through connected and innovative technologies that are co-designed by our citizens to ensure everyone enjoys the “freedom to move.” Our guiding challenge statement is:

“To achieve each person’s “freedom to move,” we will collaboratively create a multimodal transportation network that is convenient, green, and affordable, which will boost South Islanders’ mobility wellbeing score by at least 20%.”

Our Smart Mobility Program (SMP) is comprised of three ambitious projects designed to not only achieve our vision, but be scaled elsewhere. These are measured through our five key outcome themes, detailed on page 7.



- **PROJECT 1** – Delivery of Integrated Mobility as a Service (MaaS)
- **PROJECT 2** – Smart Trip Planning and Universal Payment Scheme (STP)
- **PROJECT 3** – Smart South Island Inspiration Centre (SSIIC)

This proposal is directly guided by the needs, aspirations and wisdom of our citizens. It reflects SIPP's ongoing pledge to advance "Citizen-Inspired Transformation" throughout Greater Victoria. Leading up to this proposal, SIPP facilitated over two years of resident and stakeholder engagement culminating in Vision 2040, a regional roadmap to guide how connected technologies and data should be used to improve our lives and community wellbeing.

Our SMP reflects mobility priorities identified by citizens in Vision 2040, and provides an innovative blueprint for how our communities, provincially and nationally, can leverage smart technologies to achieve meaningful social, economic, health and environmental outcomes.

### SOLVING CRITICAL CHALLENGES

At a high level, our vision addresses the most critical challenges faced by many cities across the world: rising unaffordability, aging populations, and climate change in the context of population growth, decaying infrastructure and fractured governance systems.

Our SMP takes this down to the citizen level by linking one particular solution—mobility freedom—to these challenges. An aging population means increased social isolation. Rising unaffordability means vulnerable populations move farther away from the economic base they need to thrive. Climate change means the personal automobile is no longer an acceptable option for everyone in the long-term. Fractured governance means coordinating solutions to these problems—in ways that are inclusive and effective—are more difficult.

Improving our collective access to mobility freedom, starting with our most vulnerable populations, is a journey to achieving broad economic, social and environmental outcomes.



Bike lanes and bike racks in downtown Victoria



### A CULTURE OF COLLABORATION

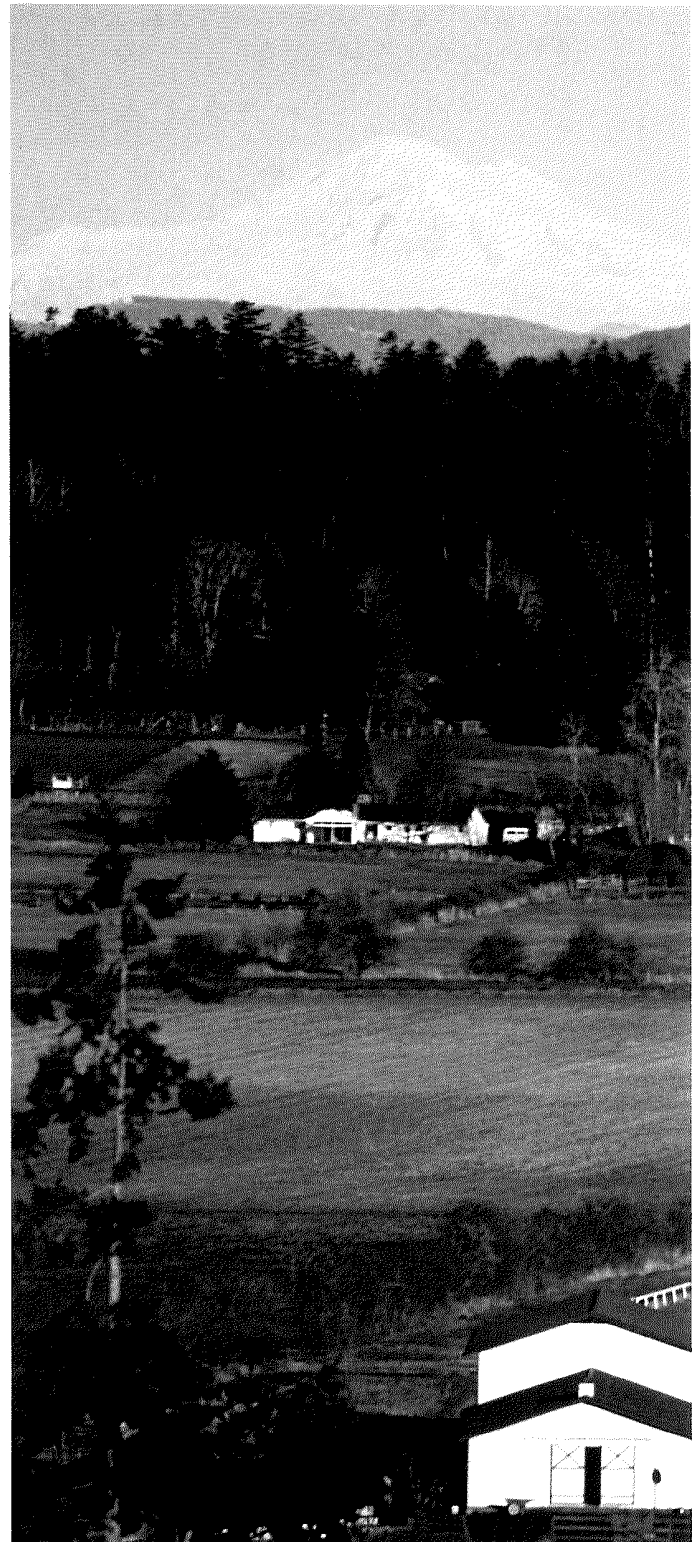
Founded in 2016, SIPP is a public-private partnership designed to engage governments, businesses, institutions, industry associations and nonprofits toward a sustainable regional economy. SIPP membership comprises 10 municipal governments, seven First Nations communities, three post-secondary institutions, seven industry associations and nonprofits, and 24 large employers. Our unique governance approach aligns closely with the Smart Cities Challenge approach, promoting openness, integration, transferability, and collaboration.

To reflect our steadfast commitment to collaboration, our name has been updated from the South Island Prosperity Project, in our initial SCC proposal, to the current South Island Prosperity Partnership. SIPP's diverse and inclusive membership is critical to the development and successful implementation of our SMP and also makes us resilient by never being reliant on a single partner.

### WHY SHOULD WE WIN?

Our vision chapter captures our commitment to deliver truly transformative change through our SMP mobility improvements. This is evidenced by swift, well-coordinated implementation and delivery, and rich engagement through our co-design process with key targeted populations. Our project management model and outcome-based feedback loop will provide the quick wins required to build momentum. SIPP's policy framework for data privacy and security will be central to maintaining data integrity for the public and our partners, while also providing guidelines for selecting the smart technologies we employ to deliver transformative change.

Our solutions are designed not only to be innovative, by integrating mobility, data and connected technologies, but also highly exportable ideas that can solve the mobility needs of Greater Victoria and beyond. Our ideas and outcomes alike will be shared with our regional, national and international partners in hopes that our successes will be modelled and scaled elsewhere.



Saanich landscape

### OUTCOMES-FOCUSED IMPLEMENTATION

We will measure our progress and success against these five outcome statements, which were identified through community consultation and stakeholder engagement. These outcomes are also captured in a highly engaging and public-facing tool we developed called the Mobility Wellness Index, the first of its kind in Canada.



**Convenience:** With more convenient, accessible multimodal transportation options enabled by smart technology, residents with access to convenient alternatives to single occupancy vehicles will increase by at least 20% by 2024.



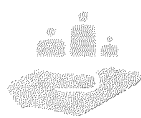
**Affordability:** With improved multimodal transportation options and trip planning enabled by smart technology, residents will spend, on average, less than 10% of their annual household incomes on transportation.



**Wellbeing:** With multimodal transportation options and planning enabled by smart technology, the number of daily trips made by active and healthy travel modes (i.e., walking, transit, cycling) will double by 2024 over the current baseline, and average levels of reported trip satisfaction in the region will rise 10%.



**Green:** Due to shifts in number of per capita daily trips taken with personal automobiles towards daily trips per capita taken with alternative travel modes, per capita vehicle fuel consumption will decrease by 15% by 2024.



**Inclusivity:** As a result of improved and more integrated multimodal transportation options and trip planning enabled by smart technology, 20% more low-income residents will report improved access to their places of education, services and/or employment by 2024.

### PROPOSAL PREVIEW

Our proposal is designed to first share **what** our vision for a smart mobility future looks like in Chapters 1–2, followed by **who** will be leading and engaged in the implementation plan in Chapters 3–4, and finally **how** we will implement it and achieve our stated outcomes in Chapters 5–8. Appendices follow, which encompass our Finance Chapter and documents supporting our submission.

- **Chapter 1 – Vision:** Our shared vision, co-design target groups, user journeys and win themes
- **Chapter 2 – Technology:** Our SMP project and technology plan details, compliance and standards, risk mitigation, linkages to outcomes
- **Chapter 3 – Governance:** Our unique SIPP and SMP governance frameworks, partnerships, and oversight, risk mitigation, linkages to outcomes
- **Chapter 4 – Engagement:** Our deep engagement to date, key findings, engagement plan for implementation phase, diversity and inclusion framework, risk mitigation, linkages to outcomes
- **Chapter 5 – Data and Privacy:** Our validated data approach, sources, data and privacy plans and compliance, risk mitigation, linkages to outcomes
- **Chapter 6 – Project Management:** Our Scaled Agile Framework, outcomes-based feedback loop, work plan strategy and schedule, core team and stakeholders, procurement plan, future-proofing, risk mitigation, linkages to outcomes
- **Chapter 7 – Performance Measurement:** Our outcome-based performance measurement framework, reveal of the Mobility Wellness Index, monitoring and evaluation plan, risk mitigation, linkages to outcomes
- **Chapter 8 – Implementation Phase Requirements:** Our reporting and legal requirements, risk mitigation, linkages to outcomes

### • Appendices

- Appendix 1: Finance Chapter
- Appendix 2: Privacy Impact Assessment
- Appendix 3: Letters of Support
- Appendix 4: Confidential Annex

### CONCLUSION

The time to do something about our mounting mobility challenges is now. For the first time in its history, our region is unified around a common goal. The Smart Cities Challenge is critical to bring this concept to reality for our citizens and, more importantly, the vulnerable populations who are being left out of our region's and Canada's collective prosperity.



# CHAPTER 1

## Vision

*"Vision without action is merely a dream.  
Action without vision just passes the time.  
Vision with action can change the world."*

– Joel A. Barker

### 1.1 GREATER VICTORIA AT A CROSSROADS

Across the globe, mobility choices touch every aspect of life: from where we live and how we access services and education, to where we work, our quality of life and wellbeing. Simply put, mobility choices give us freedom; or, conversely, a lack of mobility choice restricts that freedom and has a profound impact on how our lives are shaped. To address this complex issue, Greater Victoria is moving full steam ahead toward a new Shared Mobility future. But what does that mean, and how will this bridge a way forward for all Canadians?

Imagine a young Indigenous student hitchhiking to college or, in an emergency, spending half of his monthly income to take a taxi ride into town. Imagine a senior on a fixed income living in isolation because she can no longer drive. Imagine a new employee who recently relocated to Greater Victoria trying to establish himself, struggling to find affordable housing close to transit so that he can spend more time with his family and less time commuting. These are just a few of the compelling stories we heard from our community—stories that will be familiar to all Canadians.

Every year it gets harder for many Canadians to preserve our high quality of life: today's commutes are longer; traffic congestion and our dependence on personal vehicles is increasing; cities are sprawling, and housing costs are soaring. Meanwhile, those on the periphery—seniors, Indigenous people, persons with disabilities, minorities, immigrants and low-income families—struggle to access the mobility services that would improve their quality of life.<sup>1</sup>

Greater Victoria is at a crossroads. With rising unaffordability, rapid population growth, overlapping jurisdictions and mandates and constrained and aging infrastructure, we face imminent challenges. But there is good news. We have also never before in

history had access to so many innovative approaches to solving our citizen's challenges through the use of new technologies, data and digital infrastructure.

Now is the time to make community investments in digital infrastructure that scales and will help all Canadian communities design their own transformative 21<sup>st</sup>-century mobility solutions

Emboldened by Canada's Smart Cities Challenge, Greater Victoria and its vast network of public and private partners is ambitiously reimagining a new, shared mobility future for all of Canada: a future where our citizens—of all ages, abilities and means—are empowered with the "freedom to move."

### 1.2 A SHARED VISION FOR SMART MOBILITY

Our vision for Greater Victoria is a shared mobility future that is convenient, green, affordable, inclusive and improves the prosperity and wellbeing of our citizens. SIPP's tagline "Citizen-Inspired Transformation" is the foundation of our vision for a new mobility future in Greater Victoria that is designed by and for people, and provides an innovative blueprint for how our communities—in British Columbia and across Canada—can realize the benefits of improved transport, social and economic mobility. Driven by our vision and aspirations for Greater Victoria's mobility future, our Smart Cities Challenge Statement presented in the initial proposal is as follows:

"To achieve each person's "freedom to move," we will collaboratively create a multimodal transportation network that is convenient, green, and affordable, which will boost South Islanders' mobility wellbeing score by at least 20%."

We will measure our progress toward our challenge statement in five key outcome themes identified through community and stakeholder consultation and engagement: (1) convenience, (2) affordability, (3) wellbeing, (4) green and (5) inclusivity. Since our initial proposal, we have added an 'inclusivity'

<sup>1</sup> Assessing and Measuring the Factors affecting Mobility, Transportation Accessibility and Social Need, research report by University of Toronto for Metrolinx, [http://www.metrolinx.com/en/regionalplanning/rtp/research/Assessing\\_and\\_Measuring\\_the\\_Factors\\_Affecting\\_Mobility\\_Transportation\\_Accessibility\\_and\\_Social\\_Need.pdf](http://www.metrolinx.com/en/regionalplanning/rtp/research/Assessing_and_Measuring_the_Factors_Affecting_Mobility_Transportation_Accessibility_and_Social_Need.pdf)

outcome to underscore that our solutions must address accessibility, inclusivity and diversity. Outcome statements, baselines, indicators, and a monitoring and evaluation plan for each outcome are described in Chapter 7, including the development of the world's first Mobility Wellness Index (MWI).

The MWI is a tool we have designed to meaningfully measure the effects that mobility systems have on people's physical, emotional and economic wellbeing. According to the American Public Transportation Association (2017), vulnerable populations (e.g. women, low-income persons, seniors, new immigrants, persons with disabilities) are most reliant on public transportation. However, more research is needed to show that these populations are also more vulnerable to first-mile/last-mile challenges. With a focus on inclusive outcomes, our research will help address this knowledge gap. The MWI is designed to be scalable and replicable to other towns and cities across Canada and the world—we are currently in dialogue with Montreal (Canada), Perth (Australia) and Columbus (USA) about its applicability to other regions.

We will maintain our commitment to making progress on our challenge and outcome statements, as we have systematically aligned our Smart Mobility Program (SMP) and three major Projects to our data and technology plans, governance and evaluation, citizen engagement processes, project management and payment schedule—all carefully woven together in a performance piloting/testing and iterative investments from SMP stakeholders. This systems-based approach reduces the risk that the program strays from its original vision and is described in detail throughout the entirety of this proposal.



U-bike on electric bus at Smart Mobility Expo (October 2018)

### 1.3 OUR SMART MOBILITY PROGRAM

Our SMP is comprised of our three projects, designed to address Greater Victoria's mobility needs, and achieve our vision by measuring success through our five key outcome themes noted above. During the finalist phase, we have advanced design and engagement for our Projects by refining their direction and focus and solidifying the strong links and dependencies among the three projects, which are outlined below:

#### PROJECT 1 –

##### INTEGRATED MOBILITY AS A SERVICE (MAAS)

Mobility as a Service (MaaS) represents an innovative shift from a personal vehicle ownership model to mobility solutions that are consumed as a service. Bringing all available modes of transportation together into a single, centralized technology platform enables this shift into a new mobility future, particularly for the user. MaaS focuses on moving people, not vehicles, and is gaining traction globally.

#### PROJECT 2 –

##### SMART TRIP PLANNING AND UNIVERSAL PAYMENT PLATFORM (STP)

While Project 1 is the platform to bring people, communities, schools and employment opportunities together with a broader range of transportation options, Project 2 is the tool to make those mobility services convenient. This project is critical for improving multimodal adoption rates. This trip planner serves as the interface between the end user and the MaaS platform. It will be a seamless, universal payment system for all the region's mobility services.

#### PROJECT 3 –

##### SMART SOUTH ISLAND INSPIRATION CENTRE (SSIIC)

Our vision is that the SSIIC will start initially as a digital platform to host transportation data from multiple sources and operators into a single, usable platform. This platform is essential in the development of the digital ecosystem that enables third parties to scale the delivery of MaaS and trip planning and payment applications. Our intention is for this digital platform to evolve over time into a physical, interactive mobility lab dedicated to collaboration, education, and innovation through advanced analytics and data simulation.



## 1.4 BRINGING "CITIZEN-INSPIRED TRANSFORMATION" TO LIFE

SIPP's greatest strength as an organization and regional voice is its proven ability to unlock the exponential power of collaboration. Over the past two years, SIPP has become a key leader and facilitator of the smart mobility transformation in our region. Our early engagement process (leading up to our initial proposal) culminated with Vision 2040, our long-term vision to address major regional challenges across five key themes—environmental health, human health, economic resilience, transportation and mobility, and affordability. From this list, citizens, businesses, civil society groups and local leadership identified transportation and mobility as the single-most important priority to address today.

Since being selected as a finalist in Canada's Smart Cities Challenge (SCC), we have learned a lot about

our fellow citizens—how mobility impacts their needs, aspirations, challenges and hopes for the future. We have now met with hundreds of citizens and stakeholders in Greater Victoria, and engaged indirectly with thousands more through surveys, campaigns and online impressions. These engagement insights, described in Chapter 2, directly informed our SMP.

## 1.5 CO-DESIGN TARGET GROUPS

Vision 2040 and our ongoing engagement continues to frame our approach to the projects within our SMP, which are detailed in Chapter 2. In order to test our projects, we identified three population groups facing the most pressing challenges in Greater Victoria and across the country. Our first set of co-design target groups consist of Indigenous students, seniors, and new employees. We detail these groups and profile individual users on page 13.

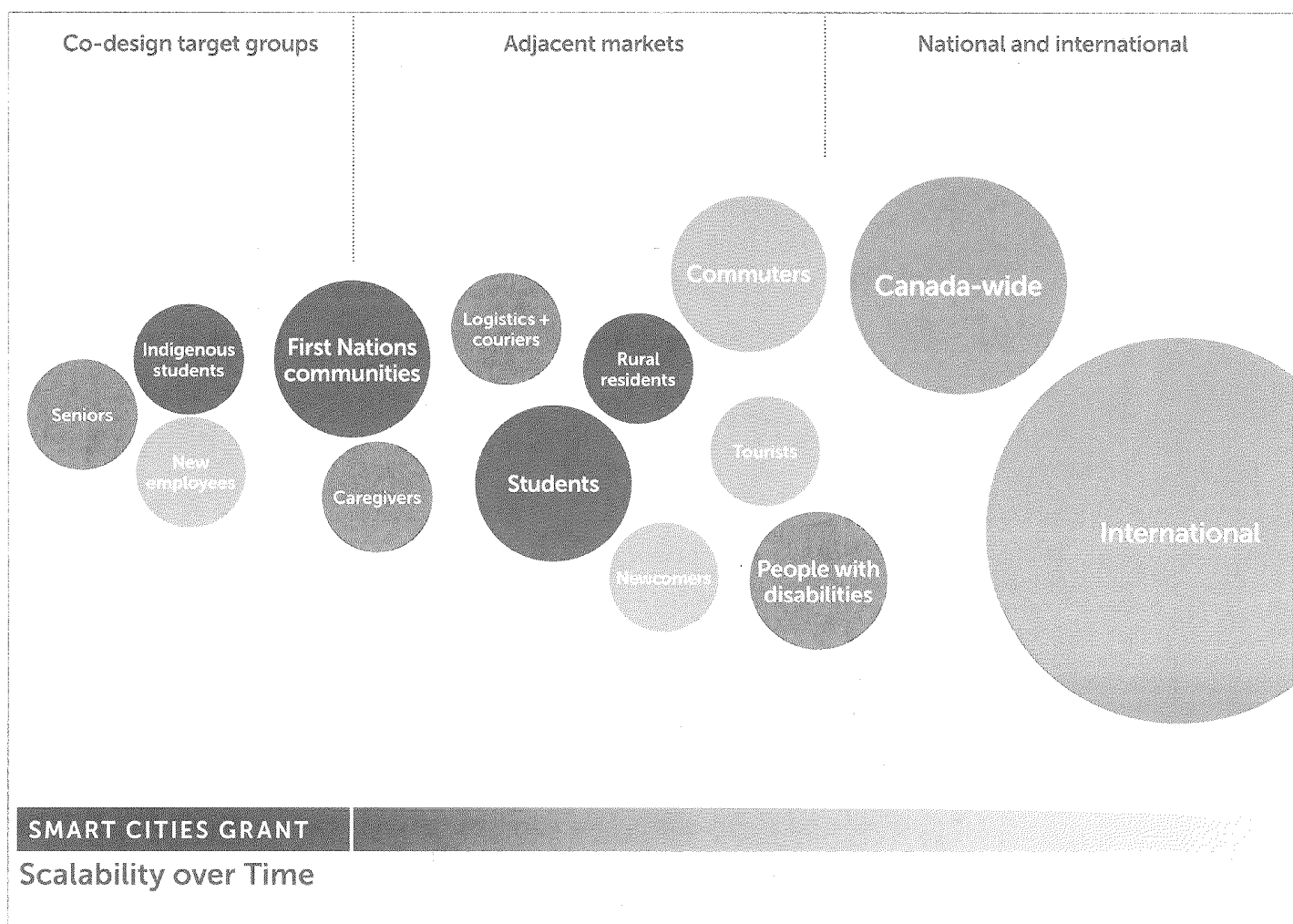


Figure 1.1: Scalability of projects

These groups share similar characteristics and mobility needs with additional population sub-sets (e.g. low-income, language minorities, rural/remote, caregivers, accessibility-challenged, etc.). Insights derived from our co-design target groups are intended to help inform services, refinements and innovation that can be used to design and scale mobility solutions for new markets with similar characteristics as shown in Figure 1.1. Over time, these solutions can scale across the broader population of Greater Victoria to achieve our challenge statement and Vision 2040 goals.

The significance of the SMP spans far beyond the co-design target groups. We expect to take our learning to extend the program to other non-emergency mobility needs of the wider Greater Victoria region to improve efficiencies, availability and the range of transit services by scaling to new local markets, rural communities across the province and, more widely, across Canada.

## INDIGENOUS STUDENTS

Greater Victoria is home to 10 First Nations communities, most of which have poor geographic connections to the wider community and economic centres, making it challenging to access education, services and employment. For Indigenous students, poor transit reliability and misaligned scheduling of existing transit service is a significant barrier that dramatically impacts their ability to access educational opportunities,<sup>2</sup> and often forces students to hitchhike or walk along hazardous roads in unsafe conditions.

## SENIORS

Greater Victoria is home to the largest percentage of seniors of any large urban area in Canada, and demographic projections show that Canada's senior population will be 23–25% of our total population by 2036. In order to age in place, mobility-limited seniors need convenient, accessible and affordable transportation,<sup>3</sup> both to meet their daily needs and

to mitigate the risk of isolation and loneliness and the accompanying mental health impacts.<sup>4</sup> Without change, this causes a social and economic cost to the country, approximately \$390 million annually for the public cost of home care for seniors with mobility restrictions.<sup>5</sup> Though particularly acute in Greater Victoria, this issue is prevalent across the country.

## NEW EMPLOYEES

Greater Victoria's economy is strong, and there are a number of important, large employers in our region who are regularly recruiting. They want and need to attract high-quality employees, yet high housing costs and limited transportation options are often a deterrent. For newcomers, it is recognized that sustainable and affordable transportation choices are most easily established if they are part of a housing choice. This problem stretches beyond talent retention for employers and is applicable to new employees, new students and overall, new residents.



Broadening multimodal options that meet the diverse needs of Greater Victoria residents

<sup>2</sup> According to Canada's Auditor General, the education gap for those living on reserve has widened over the last 15 years, [http://www.oag-bvg.gc.ca/internet/English/parl\\_oag\\_201805\\_05\\_e\\_43037.html](http://www.oag-bvg.gc.ca/internet/English/parl_oag_201805_05_e_43037.html)

<sup>3</sup> According to Government of Canada over one third of Canadians ages 65 and older are living with a disability (and over 42.5% among individuals aged 75 and up), [https://www.canada.ca/content/dam/nsc-cna/documents/pdf/policy-and-program-development/publications-reports/2014/Report\\_on\\_the\\_Social\\_Isolation\\_of\\_Seniors.pdf](https://www.canada.ca/content/dam/nsc-cna/documents/pdf/policy-and-program-development/publications-reports/2014/Report_on_the_Social_Isolation_of_Seniors.pdf)

<sup>4</sup> According to Government of Canada social isolation is a predictor of mortality from coronary heart disease/stroke to cognitive decline, [https://www.canada.ca/content/dam/nsc-cna/documents/pdf/policy-and-program-development/publications-reports/2014/Report\\_on\\_the\\_Social\\_Isolation\\_of\\_Seniors.pdf](https://www.canada.ca/content/dam/nsc-cna/documents/pdf/policy-and-program-development/publications-reports/2014/Report_on_the_Social_Isolation_of_Seniors.pdf)

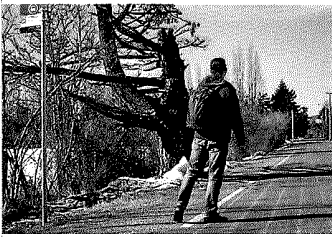
<sup>5</sup> See Accessible Transit in Canada: Building on the Benefits. Report by the Canadian Urban Transit Association, [http://cutaactu.ca/sites/default/files/cutareport\\_valuecaseforaccessibletransitincanada.pdf](http://cutaactu.ca/sites/default/files/cutareport_valuecaseforaccessibletransitincanada.pdf)



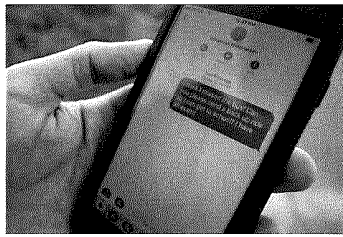
### INDIGENOUS STUDENT USER JOURNEY : JARID

Jarid, aged 23, is a post-secondary student who lives on a remote First Nations reserve that is not well-served by transit. If he misses the infrequent bus he misses his class entirely, or worse, his exams. Missing classes due to poor transit access

is detrimental to Jarid's education. A missed bus means being stranded for hours and lost opportunities. Having access to reliable, consistent on-demand transit is critical to Jarid's educational success and progress.



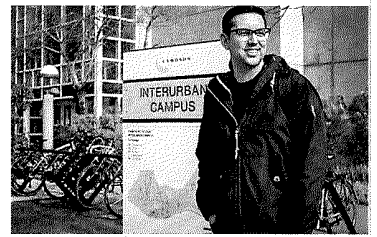
Jarid is taking transit to school for an exam. He realizes he missed the bus. The next bus arrives in an hour.



Jarid texts the Indigenous SMP text service for a backup ride to get him to school.



A First Nations community vehicle is sent to pick up Jarid for a ride to school.



Jarid arrives at school in time for his exam.

### SENIOR USER JOURNEY : JACKIE

Jackie, age 91, lives alone in a condo just outside the urban core. She is blind but still very active and sharp. Living independently is important to Jackie, but she can only maintain her independence with carefully considered pre-planning.

Accessible transit is critical to her quality of life and allows her to age in place—without it, Jackie would be isolated. Access to transit that serves Jackie's needs enhances her quality of life and keeps her connected to her community and family.



Jackie talks to the Smart Mobility Program help line to plan her travel for the week.



With their help, Jackie knows which bus route to take into town for her activities.



Jackie meets with her family in town at the local café for an afternoon snack and visit.



Jackie walks with her family to her medical appointment later that day.

### NEW EMPLOYEE USER JOURNEY : NEIL

Neil, aged 30, is new to Greater Victoria. He recently immigrated from India and has accepted a job in the urban core. Neil doesn't have a vehicle and lives far outside the core, so he

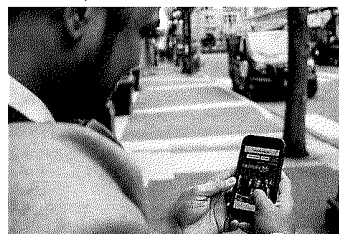
had difficulty figuring out the first/last mile of his new commute. The availability of multimodal options, like bike share, means Neil's commute is easier, convenient and affordable.



Neil has recently moved to Victoria and has been offered a new job in the city.



Neil does not own a car. He wants to know the best ways to travel and explore Victoria.



Through his new employer, Neil has access to the Smart Mobility Program app that connects him to the local bikeshare.



With the app, he can easily find, book and pay for a bike for his trips in the city.

Figure 1.2: User Journeys



## 1.6 WHY SHOULD WE WIN?

**We have a head start on our challenge and engagement** – A fundamental commitment to co-design and citizen engagement, and strong relationships built over time, have given us the insight, engagement and momentum to deliver results quickly. Not only have we tapped the innovation capacity of our community through open innovation challenges, we learned a tremendous amount that informs our SMP and implementation plan, enabling us to transition to a higher gear faster.

**We have committed partners** – We have received significant support and in-kind commitments from partners as evidenced in our partnership matrix and our 117 letters of support (Appendix 3). We have four partners categories: funding, program, funded development and research and collaborative, detailed further in Chapter 3. These partners cover a wide spectrum from engagement, citizens and civil society, to industry, and local government. We also have strong planning and implementation support from anchor partners like BC Transit and CUTA (Canadian Urban Transit Association).

**We are focused on accessibility, diversity and inclusion** – Our proposal engages directly with seven First Nations communities to co-design mobility options that will better serve Indigenous peoples and First Nations communities. Specifically, we will work with Indigenous students to improve accessibility that provides greater connections to educational and work opportunities, as well as improves social and economic inclusion. Our projects are designed to make impactful strides in improving convenience and accessibility for users with a wide range of mobility needs, and our co-design process will ensure a wide spectrum of voices help to shape and implement our SMP.

**Indigenous Smart Mobility Pilot** – Through extensive research and engagement with First Nations communities, education facilities such as Camosun College and Saanich Adult Education Centre (SAEC), BC Transit and other partners, we have been able to secure vehicle assets, drivers and training support to make the Indigenous Smart Mobility Pilot possible.

**We are the ideal Canadian test market** – Greater Victoria offers visibility as the Capital Region of British Columbia. We rank 15<sup>th</sup> out of 34 Census Metropolitan Areas in population and therefore are an optimal mid-size, smart city test-bed. The size of our region, and its rural and urban environments, means we will produce solutions that can be demonstrated, tested, delivered and refined to solve a variety of our region's and our country's challenges.

**We are already delivering and scaling** – The Mobility Wellness Index funded by the finalist grant is a collaborative tool and will soon be shared with many cities to track regional and national progress across a consistent set of indicators. This tool is now ready for use, and we have already developed strong interest from smart city peers like Montreal (Canada), Columbus (USA), and Perth (Australia) to apply the Index to their unique context.

**We have the right governance** – Globally, the biggest challenge to solving urban problems and delivering infrastructure and services is governance. We are guided by the belief that meaningful collaboration draws on the strengths of each partner and will deliver better outcomes than one partner can achieve on their own. As the only public-private partnership (P3) in the SCC, SIPP is uniquely positioned as an independent, trusted organization with a proven capacity and commitment to "Citizen-Inspired Transformation".



Student from SIPP's Future Innovator Challenge at University of Victoria

**We are trusted and independent** – SIPP is not beholden to one technology or technology provider. Rather we will ensure open technologies will be favoured in all procurement activities. By removing any specific vendor requirements in our architectures from the outset, we maximize the flexibility and transferability of our solutions. While we will work with leading-edge experts, we actively preserved our independence throughout the development of our proposal to ensure that our community maintains autonomy and control over program outcomes.

**We have early recognition** – Within a short span of time, SIPP's smart city initiatives, as well as our governance model, are becoming globally recognized. SIPP was a top-five finalist at the Smart City Expo






World Congress in Barcelona in the "Governance and Finance" category, recognized out of 473 entries for best-in-class collaborative governance. For the first time, the Intelligent Community Forum (ICF) in New York listed Greater Victoria as a 2019 Smart21 City, an annual list of the world's top cities that are actively participating in the broadband economy.

**We have enthusiasm and momentum on our side** – Community buy-in is at an all-time high, and the necessary players are at the table for the first time. Where we recently had silos, we now have the collective belief that our shared vision will become a reality. We are ready to show Canada that Greater Victoria is a smart community!



Some collaborative partners at SIPP's Transportation and Mobility Stakeholder Roundtable

## CHAPTER 1 LINKAGES TO OUTCOME THEMES

 <p><b>Convenience</b> STP makes different mobility options convenient to access</p> <p>Seniors will be provided with convenient transportation needs to mitigate isolation</p>	 <p><b>Affordability</b> Improved transit will make finding affordable housing easier to access</p> <p>Students have affordable alternative transit options</p>	 <p><b>Wellbeing</b> Better transit options improves citizens' physical, emotional and economic wellbeing measured by the MWI</p> <p>Better transit services mitigate isolation among seniors</p>	 <p><b>Green</b> MaaS focuses on moving people, not vehicles</p> <p>Vision 2040 will address and monitor environmental health</p>	 <p><b>Inclusivity</b> Better accessibility improves connection to educational and work opportunities, improves social and economic inclusion</p>
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# CHAPTER 2

## Technology

*"Sustainable solutions based on innovation can create a more resilient world only if that innovation is focused on the health and wellbeing of its inhabitants. And it is where technology and human needs intersect—that we will find meaningful innovation."*

— Frans van Houten

### 2.1 TECHNOLOGY PLAN FOR OUR SMP

Technology will be developed and delivered through our three projects to address pressing mobility needs by engaging smart technology and our smart citizens—in tandem—to achieve our “freedom to move” vision. We will measure success through our five key outcome themes (Chapter 1).

During the finalist phase, we have advanced design and engagement for our projects—refining their direction and focus and solidifying the strong linkage and dependencies among the three projects outlined below.

These projects are vehicles for improving our citizens' wellbeing and for helping us achieve measurable progress toward our challenge statement to create a multimodal transportation network that is convenient, green, and affordable, boosting South Islanders' mobility wellbeing score by at least 20%.

#### 2.1.1 PROJECT 1 – DELIVERY OF INTEGRATED MOBILITY AS A SERVICE

Mobility as a Service (MaaS) is central to our proposal approach and our vision for a new mobility future. MaaS represents an innovative shift from a personal vehicle ownership model to mobility solutions that are consumed as a service. Bringing all available modes of transportation together into a single, centralized technology platform enables this shift into a new mobility future, particularly for the user. MaaS focuses on moving people, not cars, and is gaining traction globally.

Our initial demonstration for this project will be the Indigenous Smart Mobility Pilot. During our engagement with First Nations communities, we have heard that challenges related to service availability, reliability, safety, cost of travel and a lack of awareness of service options are resulting in students, parents and local bands having to develop and operate their own ad-hoc mobility options.



The LAU, WELNEW Tribal School, part of the WSÁNEĆ School Board. All 10 First Nations in the region require reliable access to school.

The Indigenous Smart Mobility Pilot will offer flexible, on-demand microtransit service for 150-200 students across First Nations communities. It will leverage the deployment of existing community-owned or community-run vehicles in a more efficient and coordinated manner. Through several meetings with First Nations communities, we were able to assess the availability of community-owned vehicle assets and drivers, which could be engaged to achieve this MaaS pilot (see Chapter 6 for details on infrastructure readiness). We have gained significant buy-in for this concept by First Nations communities, and this level of collaboration should not be understated as it is critical to our success.

Over time, this pilot will scale to provide more flexible and on-demand mobility services within First Nations communities (for example, non-emergency medical transport services). All customer-facing elements of MaaS must look, feel and have functionality that users want and need. We will develop these through a co-design process with our three co-design target groups. These will be provided, and enforced against a common library of tools, APIs and data standards.

In developing our MaaS concept, we drew from experts who have deployed MaaS pilots in commercial settings around the world. We learned from the

Canadian Urban Transit Association (CUTA). This helped inform not only our vision, but also our engagement, co-design process and implementation plan focusing on high-needs groups. We can quickly deliver pilots that can be replicated for other geographies and groups. Through the implementation of MaaS, we can also offer insights on how to improve efficiencies and expand service options for seniors and people with disabilities (e.g. BC Transit and handyDART). We expect this MaaS approach to be flexible, on-demand mobility that will scale to new local markets, more rural communities across the province and more widely across Canada. We envision Greater Victoria as a showcase for regional MaaS and as an exporter of convenient, scalable and multimodal solutions.

### 2.1.2 PROJECT 2 – SMART TRIP PLANNING AND UNIVERSAL PAYMENT PLATFORM (STP)

While Project 1 is the platform to link people, communities, education and employment opportunities together through a broader range of mobility options, Project 2 is the tool to make those mobility services convenient—a critical element to improving multimodal adoption rates. Our trip planner is the critical technology interface between the end user and the MaaS platform. Project 2 will enable a user to plan, book and pay for travel through a single MaaS account. These core functions will be developed and available to all participating MaaS providers in order to establish a single, shared technology platform.

### 2.1.3 PROJECT 3 – SMART SOUTH ISLAND INSPIRATION CENTRE (SSIIC)

We envision that the SSIIC will serve as the region's shared digital platform for hosting transportation data from various sources and operators into a single, usable platform. This project will establish a trusted data commons to support the functionalities that will help us deliver Projects 1 and 2. This digital platform is critical for enabling third parties to scale the delivery of MaaS and trip-planning and payment applications, which will make the 'integration of services' achievable. It will also enable third parties to access or upload data from various providers by entering into data sharing agreements directly with SIPP, rather than undertaking agreements among many different parties or agencies.

The SSIIC will make transport data more open and accessible to all citizens of Greater Victoria, so that they can make better, more informed decisions related to mobility and the region. This is made possible through the development of open data mapping, visualization, analytics and simulation tools. Over time, we envision that this platform will evolve into a physical, interactive mobility lab dedicated to collaboration, education, and innovation through advanced analytics and data simulation. Entrepreneurs, researchers and others will use the SSIIC to pilot and develop their own projects, businesses and innovative pilots. The SSIIC could also be expanded to address the four other goal areas in our Vision 2040 plan in addition to improving transportation.



Trip-planning smartphone application © Arup

Figure 2.1 outlines the technology architecture and the Smart Mobility Program (SMP) framework for this project. Standardization of data and tools make it easier for new mobility providers to participate in the SMP, and enables new services to be integrated safely and efficiently. This process will also enhance the value delivered from existing mobility services, by enhancing their potential market reach and connecting them with related services. It will enable new partners to join the SMP to address remaining inefficiencies within the region's mobility network by having a clear set of shared standards and common interfaces to services. For example, new transport providers will be attracted to the region for two reasons: rider demand is aggregated across the mobility network, making it easier for new service opportunities to be identified, and a common library of standards and tools reduces time for new services to be validated.



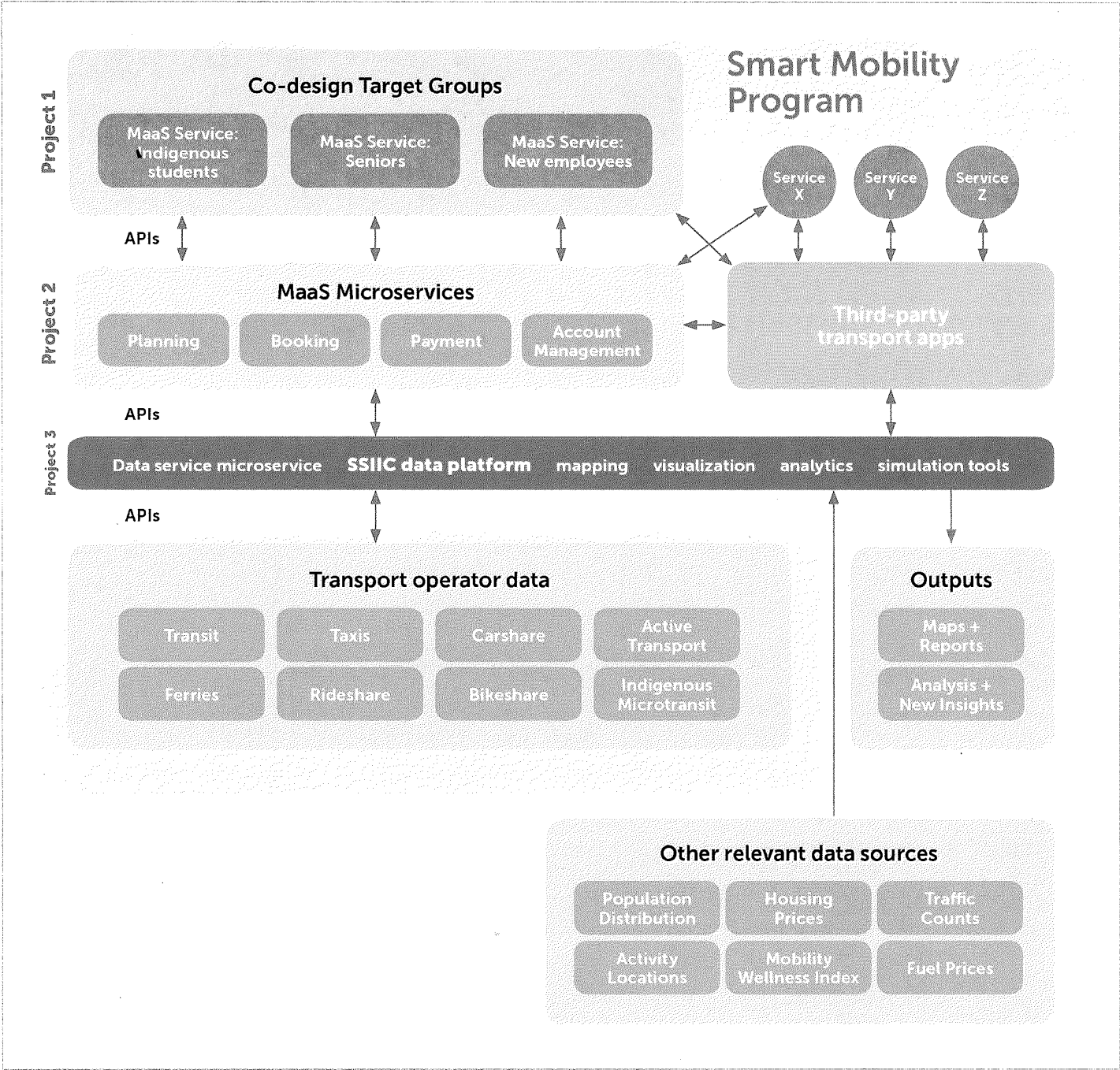


Figure 2.1: Technology architecture and Smart Mobility Program

## Technology details and applications

The MaaS platform is constructed as a framework of microservices that communicate through application programming interfaces (APIs). Developers can configure functionality to be used as part of each deployed MaaS service (see Figure 2.2). New requirements and mobility tools can be added as extensions to the core framework. Mobility tools can be identified as standalone fixed components of functionality accessible by other services.

The advantage of the microservice approach is that changes to external systems have little impact on the underlying deployed services. For example, if the planning microservice uses Google Maps as the primary supplier of directions information, and there is a decision to replace Google Maps or enhance it with another system, the impact to the underlying deployed MaaS services is minimal. This helps ensure future-proofing, so that our platform is not anchored to a single supplier.

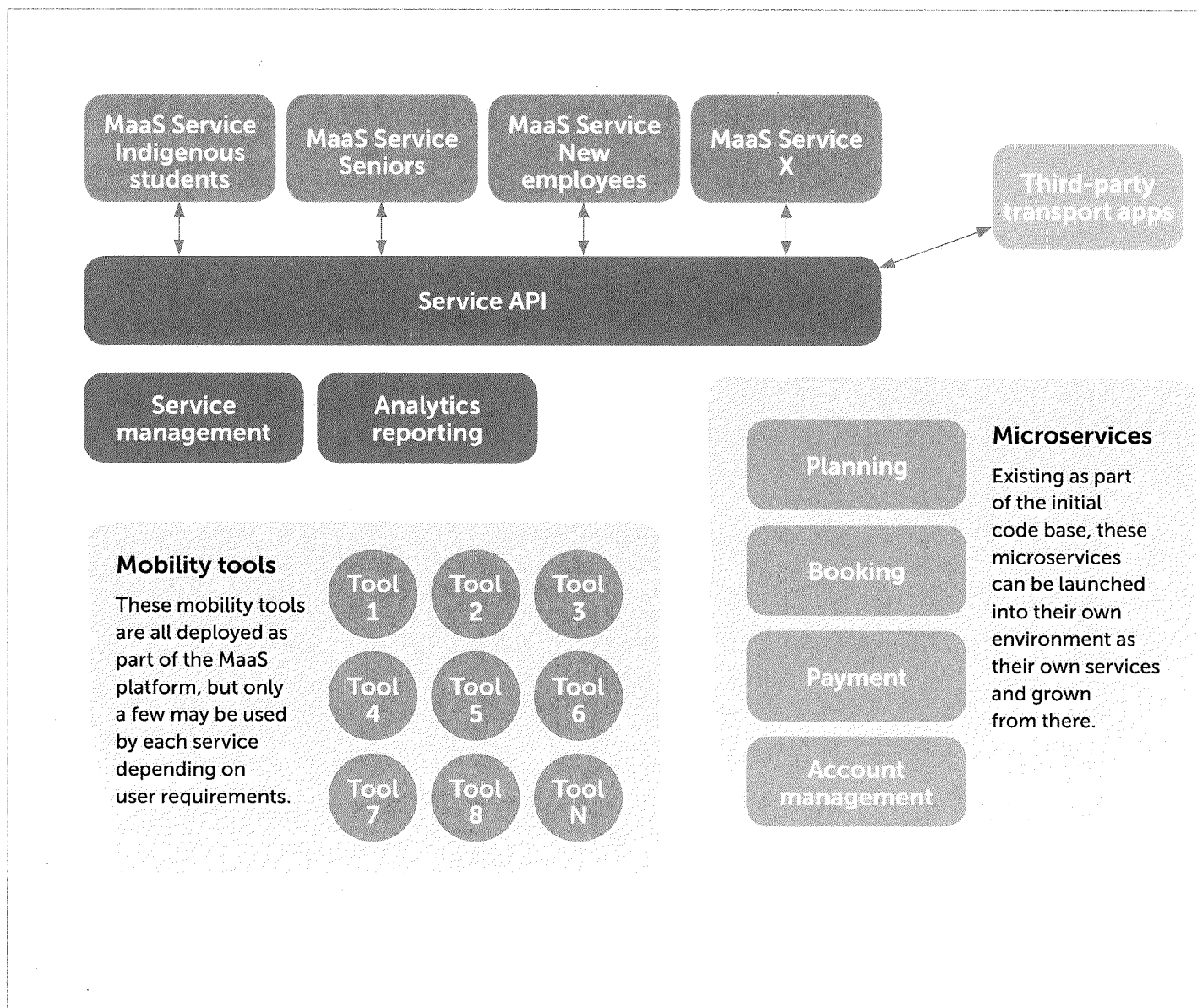


Figure 2.2: Microservice approach



## Project 1: MaaS

As outlined in our Vision (Chapter 1) we focused our MaaS pilots on three co-design groups and introduced an Agile project methodology (Chapter 6) to deliver quick wins, while enabling us to innovate as we iterate and develop the MaaS pilot.

The technology focus for Project 1 will be on the co-design process that will help determine user requirements for the MaaS service. The co-design process provides both the user requirements and customer trips from which we will build the service and adapt the MaaS platform in Project 2. These two projects will then determine the data to be delivered to Project 3, so there is a strong symbiosis between our projects, as well as shared technology and data-sharing benefits across our SMP.

### Low-Tech + Low Cost = Maximum Impact

*"Sometimes the smartest ideas aren't the most technological ones. If our communities can't benefit from new technologies because some people don't even have connections to WiFi in their home, then we're forgetting that our goal is people."*

- Chief Ron Sam, Songhees Nation

Our community can only realize shared benefits from new technologies and mobility services if our solutions have wide-reaching positive impacts for all of our residents. Our engagement with the Beecher Bay (Sc'ianew) First Nation, provided valuable insight to the technology challenges that are faced by residents, who do not have a cell phone tower in the area, meaning data coverage is extremely limited in this location.

Careful consideration has been given to the user interface for the Indigenous Smart Mobility Pilot because data coverage in rural and First Nations communities are often limited. Through engagement with the First Nations communities, it was noted that a text-based notification approach, coupled with a web-based application would be developed in order to reach a wider audience of users.

This strategic choice enables us to not only be a smart city but to also be an inclusive city by providing smart solutions that do not require out-of-pocket costs by the users and are easily scalable to technological and financially vulnerable populations. Taking a low-tech, low-cost approach, while co-designing directly with users to address critical needs, as in this case, can often can yield maximum benefits and realize the smartest solutions.

Table 2.1: Project 1: MaaS technologies

MaaS Technologies	What does it do?	What does it achieve?
User account microservice	Allows registration and authentication of user and account set-up	Interoperability, scalability
API gateway	Provides communications to services within Project 1 and future third party in other areas	Interoperability, scalability, future-proofing, replicability, feasibility
Web app	Responsive website that can be used like an App for user to access or request the MaaS service	Interoperability, inclusivity, scalability
Mobile app	Application written for iOS/Android smartphones to access or request the MaaS service	Interoperability, scalability, future-proofing
Support functions	Functionalities to support printing of itineraries, responsive interfaces, personal phone support or webchat	Interoperability, inclusivity
Mobility tools	Specific tools developed to meet a users' requirements. Examples include a transportation cost calculator, taxi fare splitter, or a supplier dispatch tool to coordinate community vehicle supply with demand (for Indigenous MaaS Pilot).	Inclusivity, scalability, future-proofing

This initial technology approach ensures that we are delivering on the following outcome statements:

- Convenience – low barrier for users to access the technology required to be a part of the Indigenous Smart Mobility Pilot;
- Affordability – low or no cost to upgrade required hardware/software technology;
- Wellbeing – improving on wellbeing with access to alternative transportation options;
- Inclusivity – this approach ensures the Indigenous Smart Mobility Pilot is available to everyone within the target group, by offering a low barrier and no/low cost to access and use the service.
- Green – users will have improved awareness of walking and cycling options for their trip

In future iterations and Stage Gates, technologies will be developed and scaled to address the needs of the other co-design target groups and markets.

Table 2.2 outlines the MaaS technologies we will be utilizing, what they enable or support, and the goals and outcomes they help achieve.

### Project 2: STP

The trip planner is the primary interface between the end user and the MaaS platform. The following are the key functions we will specify for the service delivery partner during the implementation phase:

- Planning: Plan trips using multiple modes of transportation
- Booking: Booking integration of mobility services that include both “on-demand” services (community buses/vehicles, handyDART, and taxis) and scheduled services (BC Transit bus services, BC Ferries)
- Payment: Payment technology that provides a seamless experience for users and enables payment distribution across mode providers. Multimodal payment technologies also provide opportunities to drive new business, partnerships and equity initiatives

Table 2.2: Project 2: Smart Trip Planner

MP2 TECHNOLOGIES	WHAT DOES IT DO?	WHAT DOES IT ACHIEVE?
Trip Planner Microservice	Connects and consolidates travel data sources with trip plan requests	Interoperability, scalability
API Gateway	Provides communications to services within MaaS and future third party in other areas	Interoperability, scalability, future-proofing
Fallback function	Microservice functionality to provide geographic coverage via third party data	Interoperability, inclusivity, scalability

Table 2.3: Project 2: Payment technology

TRIP PLANNER PAYMENT TECHNOLOGIES	WHAT DOES IT DO?	WHAT DOES IT ACHIEVE?
Payment Microservice	Provides MaaS service user functions (registration and management of funds in/out, checks, refunds and termination) required to link to third party banking service. Required for pre-paid and payment gateway payment	Interoperability, inclusivity, scalability, future-proofing, feasibility
MaaS Stored Account API	Communications service to support a pre-paid banking service	Interoperability, scalability, future-proofing, replicability
Multiple Payments API	Communications service to support a pre-paid banking service	Interoperability, scalability, future-proofing, replicability



- **Standardized Account Management:** Establish shared account management policy and processes across mode providers and network operators to ensure efficient and equitable service delivery to all populations in MaaS service zones.

As a microservice nested within the MaaS technology platform, the trip planner connects to other third party systems to respond to a user trip request coming from a central gateway controller. This is a single point for all trip-planning requests and is made available by an API for all the MaaS services and third parties.

The trip payment platform will support multiple payment types to ensure inclusivity. Use of tokens and digital wallets will be used for both real-time and recurring payments as we move closer toward a cashless society. Payment friction can be minimized improving the user experience while also reducing payment bottlenecks. The platform would also link transport operators to various financial networks to ensure proper payment authorization, settlement and reporting.

### Project 3: SSIIC

SSIIC will initially be a digital platform and clearinghouse, integrating a wide range of data from multiple third-party sources including transport operators, municipal governments, and other data providers (detailed in Section 5.2). It will be hosted on a secure cloud-based platform that contains microservices and tools to request, visualize, and analyze mobility data. Data are owned and stored by third parties and would be accessible to the SSIIC by APIs. This hosted service will reside in Canada.

The integration of data within the SSIIC addresses two primary use cases:

- For a MaaS transport app developer, the SSIIC will integrate data to enable the development of universal trip planning and trip payment (e.g. Projects 1 and 2).
- For residents, planners, and decision-makers in Greater Victoria, the SSIIC will integrate data to visualize, analyze, and simulate how mobility is affecting key outcomes.

Over time, the SSIIC intends to evolve into a physical common space, enabling citizens to engage and collaborate on transport and mobility challenges in Greater Victoria. This might include the following:

- Public engagement sessions on transport, urban issues, smart city solutions
- Hackathons on transport and urban issues
- User training and support related to MaaS, data and privacy education

Table 2.4 outlines the technologies and functions related to Project 3. These technologies will be selected from best-in-class providers, developed through SIPP partnerships, or developed through open procurement processes. Open-sourced solutions will always be given priority in keeping with the vision and philosophy of our SSIIC and our governance model.

Table 2.4: Project 3: SSIIC technologies

SSIIC Technologies	What does it do?	What does it achieve?
Data Source Microservices	Connects data requests from MaaS, trip planner, and visualization/analysis (SSIIC) microservices to third-party data provider APIs.	Interoperability, scalability, future-proofing
Mapping and Visualization Tools	Displays transportation network and spatial data as layers on an interactive map, with corresponding charts and graphs	Interoperability, scalability, future-proofing
Analytics Tools	Calculates data from multiple sources to enable analysis of mobility and outcomes	Interoperability, scalability, future-proofing
Simulation Tools	Enables user input of transportation network and spatial data attributes to test the change in outcomes and test "what if" scenarios	Interoperability, scalability, future-proofing
API Gateway	Provides communications for MaaS and third-party developers to connect to the Data Source Microservices	Interoperability, scalability, future-proofing
Open Data Portal Web Application	Provides public access to open data sources and mapping, visualization, analytics, and simulation tools	Interoperability, inclusivity, scalability, future-proofing

## 2.2 FUTURE-PROOFING AND SCALABILITY

Future-proofing and scalability are essential to our Smart Mobility Program. These attributes have been integrated into our project's architecture and technical design, the development processes to design the services, supporting partnerships, and open technology standards. Specific elements are detailed in the following sections.

### 2.2.1 TECHNICAL DESIGN

#### Microservices Approach with open APIs

This approach has been specifically chosen to support re-use. This approach also enables third parties to access and adopt these services.

#### Hosting

For our web application model we intend to separate the architecture into presentation, application and persistence layers. This architecture has been designed to scale out by adding additional hosts at the persistence, web or application layers and has built-in performance, failover and availability features. Using a cloud-based hosting model makes it easy to set up, operate, and scale.

#### Fallback Functionality

This functionality allows usage of basic features in the trip planner to be utilized outside Greater Victoria. This enables potential adopters (municipalities, customers) to have some initial interactions in a live environment.

### 2.2.2 TECHNICAL PROCESS

#### Co-design process

The co-design process that guides our projects ensures that the MaaS services, the microservices and mobility tools are intimate to user needs. After co-design, the draft functionalities will be prioritized (by users) by their impact on behaviour and attractiveness to users/new users. This supports widespread adoption by users.

#### Local innovation challenges

SIPP has a proud record of hosting successful "hackathon"-style innovation challenges (Chapter 4). These have produced highly innovative products and services. This open call for solutions, married with

the open platform upon which solutions can be built, provides an incubator and infrastructure that support innovation. These events will continue to have an impact by way of innovators participation, and project visibility and scalability.

### 2.2.3 TECHNICAL PARTNERSHIP

#### SSIIC digital platform

The SSIIC will host a centralized library of products (microservices, API Gateways, Mobility Tools and APIs) and business rules (technical, organizational and commercial arrangements to deliver the services). These will be made available to municipalities and other stakeholders in order to increase adoption and reduce development costs.

#### Scaling across Canada

We have partnered with BC Transit and CUTA to assist with the dissemination and scalability across British Columbia and Canada, notably in creating a Co-Design Toolkit and MaaS guidelines, as well as aligning specific dissemination activities with their wider ongoing networking and technical development outreach.

### 2.2.4 OPEN STANDARDS

We are committed to a non-proprietary, multi-vendor architecture and procurement. Wherever possible, we will defer to open systems to support transferability of solutions, reduce single points of failure in the design, and enhance innovation wherever possible in the architecture. Open standards allow for rapid and sometimes disruptive innovation to occur throughout the value stack, and truly enable citizen inspired and engaged innovation.



Open Innovation Challenge winner, Simon Park, with his prototype of Caboost, an electric bike assist that can be attached to regular bicycles

## 2.3 COMPLIANCE AND STANDARDS

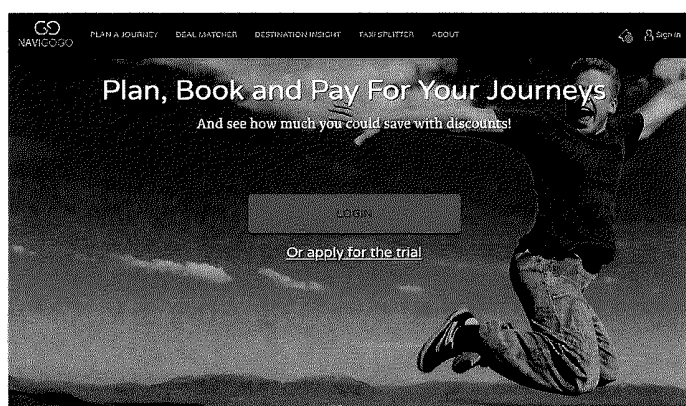
Table 2.5 shows relevant compliance areas and conformity to standards.

Table 2.5: Compliance and standards

Compliance Area	Standards Conformity
Personal privacy/digital rights	PIPA (BC)
Legislation/directives governing financial prudence and exclusions	Fintrac (Financial Transactions and Reports Analysis Centre of Canada) regulations regarding KYC, AML, MSB
Interoperability of ticketing within and between modes	EMV contactless payment standard P2P Tokenization for Card on File transactions
Security in financial transactions featuring credit cards	Payment Card Industry Data Security Standard (PCI DSS) SOC1/SOC2 NIST/ISO security frameworks

## 2.4 TECHNOLOGY PARTNERS

SIPP will work with its well-developed network of technology partners to deliver the technical solution and integrate component parts. Our diverse partnerships offer SIPP the help and capabilities needed to successfully build out MaaS. These capabilities include: scheduled display, real time display, trip planning, pricing, payment, ticketing, and integrated multimodal route optimization. SIPP has engaged a wide range of technology partners and has received numerous statements of support and interest as evidence of their commitments to supporting our SMP. These statements of support and interest can be reviewed in Appendix 3.



NaviGoGo is a MaaS application designed by young people. © NaviGoGo

## 2.5 INCLUSIVITY AND ACCESSIBILITY

It is imperative that the advances made through our projects are inclusive, accessible and have benefits for all people. Where digital technologies are a focus, individuals can be excluded because of: (a) poor awareness/promotion of new solutions; (b) lack of access to smartphones, computers or internet; (c) poor data connectivity; (d) poor interfaces or usability. We will promote inclusivity through:

- Considerations of service deployment – e.g. use of free SMS text messaging or helplines alongside digital options (e.g. website or app);
- Ensuring the ability to use digital services offline (e.g. allow users the ability to use WiFi to plan trip but save trip plan for offline use);
- Collaboration and co-design with users to design and test appropriate interfaces and easy usability;
- Using a range of interface and communications options to be fully responsive to users with a range of disabilities;
- Creation of video content, case studies and real-life examples on what to expect when using accessibility features available for modes of transport;
- Trip planner can be designed to provide user profile selections that offer meaningful accessibility information to users, integration of in-transit accessibility information such as walking distances or walk scores, curb ramp availability or sidewalk conditions;
- Call-in services are maintained (see User Journeys page 13).

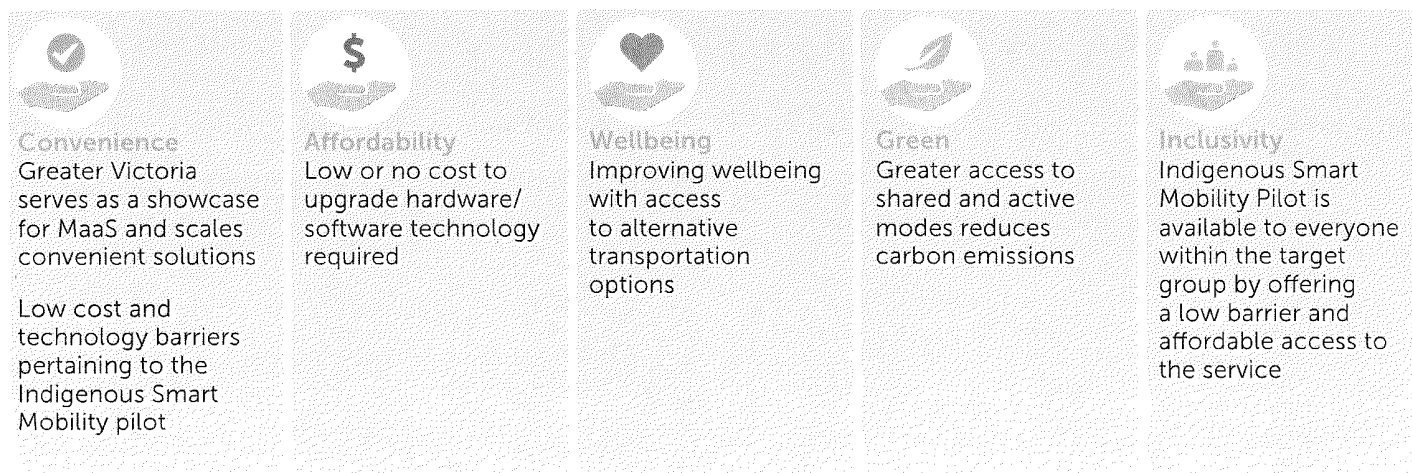


## 2.6 RISK MITIGATION

Table 2.6: Risk mitigation strategies

RISK	MITIGATION STRATEGIES
Technological components are not suited to task	All major system elements will be evaluated for (at least): scalability, interoperability, standards compliance, secure design and extensibility.  Our open architecture and capacity to plug and play means we are not tied to any one supplier solution and can adapt and transition services as technology evolves. In our procurement strategy we will include an assessment of vendors' capability to deliver.
Change management practices incomplete	Through our PMO, we will ensure all changes are validated. Changes will be signed off and escalated if they impact form, fit or function.
Architecture is not fit for purpose	Formal architecture design is an integral part of the overall co-design method. Architectural designs will be signed off by steering committee and technology taskforce prior to development.
Lack of inclusivity (digital divide)	Our co-design process will include consideration of potential inclusivity issues related to co-design target groups. As noted earlier, a key issue relating to payment are those people who are unbanked or with reduced banking trust, and solutions such as pre-paid accounts will be explored.

## CHAPTER 2 LINKAGES TO OUTCOME THEMES



# CHAPTER 3

## Governance

*"We were impressed by the broad range of organizations that were actively engaged and the level of involvement of all parties. The effort put in by SIPP in ensuring all stakeholders are fully vested in this project, and that the public good is kept front and centre, is second to none."*

– David Oliver, Co-founder and CEO, Greenlines Technology, Inc.

### 3.1 INTRODUCTION

Poor governance hampers the effective delivery of infrastructure and services. This issue is compounded in the context of smart mobility, as across the world we are seeing an influx of private operators into what had previously been “public” mass transit. Metrolinx, the regional transportation authority in the Toronto region, identified this issue in its report on New Mobility,<sup>1</sup> emphasizing the urgency of creating new skill sets, processes and partnerships with more flexible and responsive procurement processes to encourage private-sector innovation.

SIPP is different. Founded in 2016, we promote sustainable economic development in the interests of our membership, which includes 10 municipal governments, seven First Nations, three post-secondary institutions, seven industry associations and nonprofits, as well as 24 large employers.

We are a public-private partnership (P3) guided by the belief that combining the strengths of each partner will deliver the best outcomes and that our collective action and investment is greater than the sum of its parts. While P3s are strongly associated with infrastructure delivery and risk transfer, SIPP’s is similarly positioned to draw on the strengths of each partner to deliver better SMP and project outcomes than if any one party were to operate on its own (also placing risk in the ownership of the partner best suited to manage it).

SIPP has a similar structure and mandate to the Columbus Partnership, the organization behind the winning proposal of the 2016 USA Smart City Challenge. Like Columbus, our collaborative model builds and aligns partnerships with key implementation partners that have similar interests

and needs, such as mobility service providers, education and research institutes, technology providers, data specialists, municipal governments and First Nations communities, among others. These strategic partnerships are key to delivering a project this complex and to maximizing the likelihood of successful implementation locally and scalability to other regions of Canada.

### 3.2 GOVERNANCE FRAMEWORK

Our collaborative governance model allows SIPP to fast track implementation across the region. We can deliver quick wins at each stage of development, thus reducing project delivery time and costs. SIPP was structured by its funders to offer many notable advantages:

- Lean, efficient organization offers value for money
- Vigorous partnership network drives development, coordination and project management
- Diverse membership increases stakeholder buy-in and promotes transparency
- Singular operational focus creates clear priorities and effective processes
- Efficient operational structure can scale during project implementation

#### 3.2.1 SIPP GOVERNANCE

SIPP’s Board of Directors includes business leaders, First Nations leaders and academics, as well as legal and accounting experts. Our board operates within a well-defined policy governance mandate using rigorous standards derived from the Carver model, defining roles and relationships in four key areas: governance process (governance style and board responsibilities), strategic objectives (planning, monitoring and evaluation functions), executive

<sup>1</sup> New Mobility. Metrolinx, 2016. Technical Paper 4 to support the Discussion Paper for the Next Regional Transportation Plan, [http://www.metrolinx.com/en/regionalplanning/rtp/technical/04\\_New\\_Mobility\\_Report\\_EN.pdf](http://www.metrolinx.com/en/regionalplanning/rtp/technical/04_New_Mobility_Report_EN.pdf).

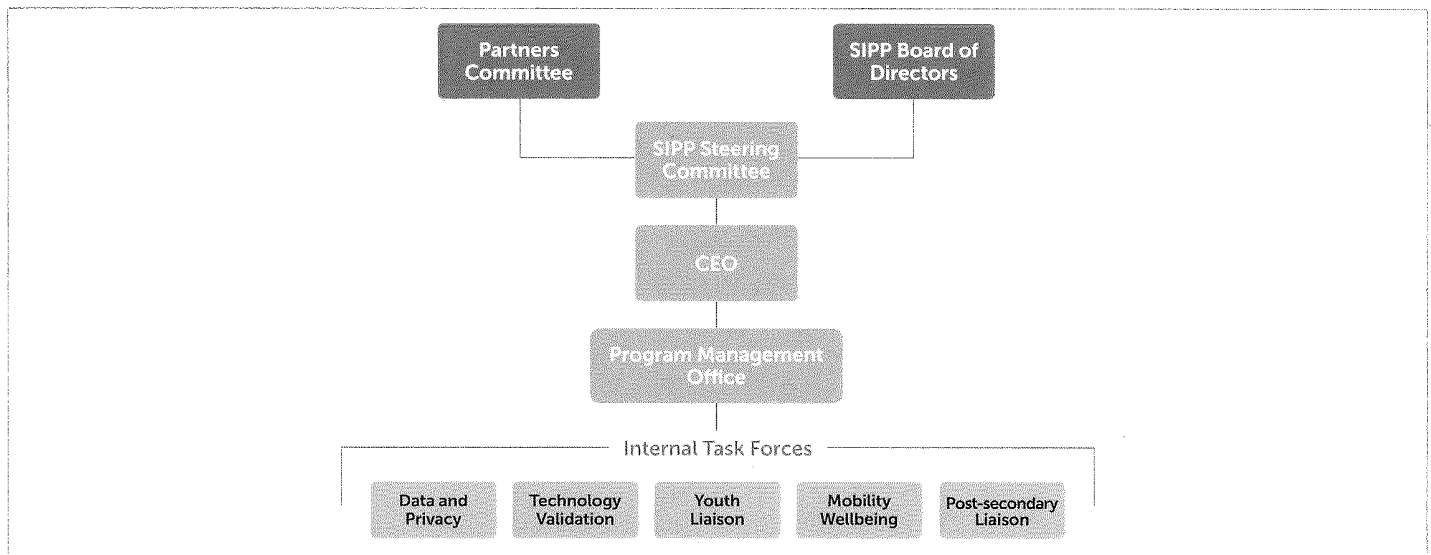


Figure 3.1: SMP governance and organization

limitations (checks on CEO powers including financial planning, asset protection, compensation, staff treatment, and more) and board-management delegation (nature of relationship between Board and CEO including delegation, monitoring and reporting). A finance, accounting and risk management committee supports this critical governance function.

SIPP's Board of Directors is accountable to our membership. The members form a Funder Council that approves bylaws, receives annual audited statements and performance reporting and elects Board members according to a competency-based board recruitment, nomination and election policy. There is a clear delineation between the roles and responsibilities of the Funder Council, the Board of Directors and Operations (led by a CEO) in order to promote effective accountability, transparency and mission focus.

### 3.2.2 SMART MOBILITY PROGRAM GOVERNANCE

Figure 3.1 details the governance structure for the SMP. Since 2017, SIPP has had a Smart Cities Steering Committee, which meets biweekly and is comprised of Board members and key implementation partners. The Steering Committee is comprised of the Mayor of Victoria (and Chair of the Partners Committee), the CEO of BC Transit, a Councillor from Esquimalt (and representative-at-large of the Partners Committee), the Executive Director of Songhees Nation and SIPP Board members and CEO.

A strategic advisory committee called the Partners Committee, which meets bimonthly, represents 11 local and First Nations governments and community leaders. The Partners Committee provides critical linkages to government and community stakeholders and establishes key program criteria, such as the challenge statement, outcomes statements and Vision 2040. In addition, SIPP has specialized subcommittees and taskforces to ensure the SMP aligns to agreed-upon outcomes and local priorities.

The Steering Committee has primary accountability for managing the day-to-day implementation and integration of the three SMP projects and will be supported by the Program Management Office (PMO), with staff and contractors managed by the CEO, along with associated taskforces.

The PMO will provide oversight across all three projects comprising the SMP and will align the delivery with Steering Committee direction. It will facilitate the sharing of resources, planning and information to manage dependencies between the projects. It will also help coordinate the three SMP projects, while setting standards for how each project should be delivered. The PMO will liaise the program management function with staff leads for data management, community engagement, partnerships and technology.



### Financial Oversight

SIPP has the financial enterprise systems in place for an effective compliance environment, which will apply to the delivery of the SMP as well. Specifically, role-based permissions and approval limits are predefined and tailored based on stakeholders' intimate knowledge. Funds will be managed, tracked and governed using fund accounting in the financial enterprise system, and the PMO will be supported by a certified financial controller and legal counsel.

Sound financial internal controls are in place, including segregation of duties, approval limits, third-party validation, quality assurance practices and internal audits. In addition, other financial practices include retention of a part-time CFO, a certified accounting and bookkeeping firm, and an active Financial, Audit and Risk Management Committee. This allows SIPP to be flexible, manage financial and governance risks and comply with government financial reporting requirements.

On a monthly basis, the financial statements, which comprise the statement of financial position, statement of operations, changes in net assets, and statement of cash flows, will be prepared in accordance with the Canadian accounting standards for NFP organizations. The financial statements are approved by the Financial, Audit and Risk Management Committee on a quarterly basis and subsequently by SIPP's Board of Directors. On an annual basis, the financial statements will be audited by a member-appointed external auditor (historically KPMG).

### Taskforces

Our taskforces help SIPP access the knowledge, local, national and international networks, and expertise of diverse stakeholders and subject matter experts. Applying these lenses allow program ideas to scale and find multiple applications for tools and technologies.

- **Data and Privacy** is co-chaired by the Chief Information Officer (CIO) and Chief Technology Officer (CTO) from the City of Victoria and includes the CIOs/CTOs of 10 other

municipalities. It is responsible for considering data availability, data accessibility, data sharing, data security and data privacy, as well as making recommendations for inter-municipal cooperation.

- **Technology Validation** provides technology guidance with a focus on user requirements. It provides input on the technical feasibility to design, deploy and maintain the proposed projects, the long-term viability and scalability of proposed solutions and performs technical validation with local and global experts.
- **Youth Liaison** provides an ad-hoc organization to explore youth engagement in the SMP. It will research barriers to multimodal transportation that young people experience and make recommendations on ideal engagement techniques.
- **Mobility Wellness** oversees the regional MWI throughout the project as outcomes are monitored. It will guide refinement of future iterations and provide advice on how to scale the index to other cities in Canada and beyond.
- **Post-Secondary Taskforce** provides coordination with the University of Victoria, Royal Roads University, and Camosun College in the development and implementation of the SMP.

### 3.2.3 SIPP PARTNERSHIPS

Our proposal is built on firmly established partnerships and collaboration, and we draw on expertise and resources from a broad array of industry experts, political leadership and national and international smart city peers. Many of these partners have collaborated with us already in the development of the SMP. This proposal is a testament to our effort to collaborate with our partners who have contributed their expertise throughout this application. With our aligned priorities and investments, the impact the Smart City grant will have on our community, and across Canada, will be amplified many times over.

SIPP's partnership model demonstrates exceptional community support and alignment. We have four partner categories: funding, program, funded development and research, and collaborative. Not only do these partners reduce risks associated with lack of buy-in down the road, they also represent key implementation partners. If awarded the grant, this will allow SIPP to immediately mobilize, implement and scale program delivery. Our partnership model also provides the opportunity for collective advocacy in key areas of the economy and mobility.

SIPP has phenomenal community and stakeholder support in Greater Victoria, BC, Canada and the world (see 117 letters of support in Appendix 3). In addition, SIPP has established strategic memoranda of understanding (MOUs) to foster enhanced collaboration with three key partners: Shanghai's Centre for Smart City Promotion (China), Camosun College and currently under development with the city of Columbus, Ohio (USA).

(See full partners list in Appendix 4 and summarized in Figure 3.2.)

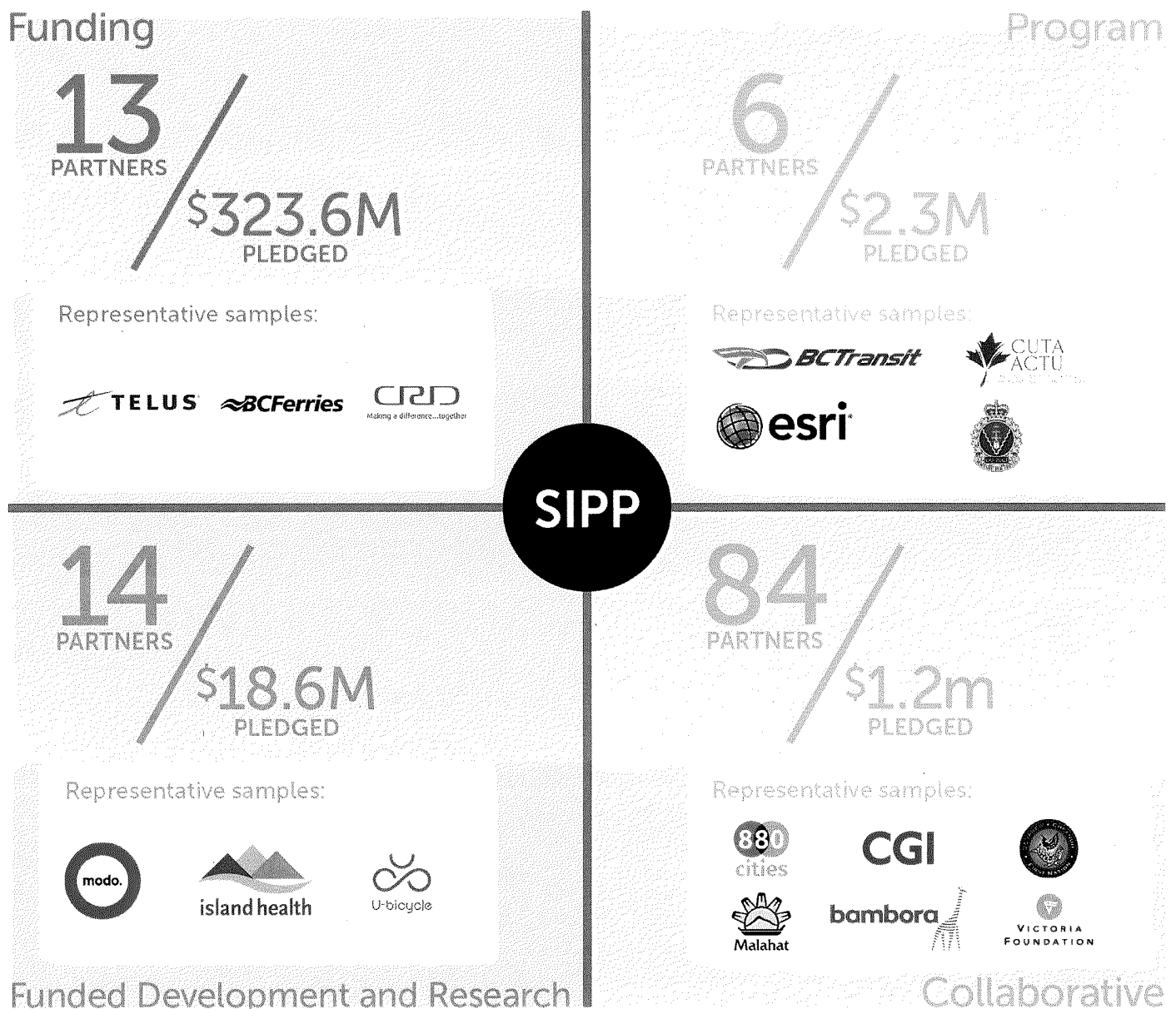
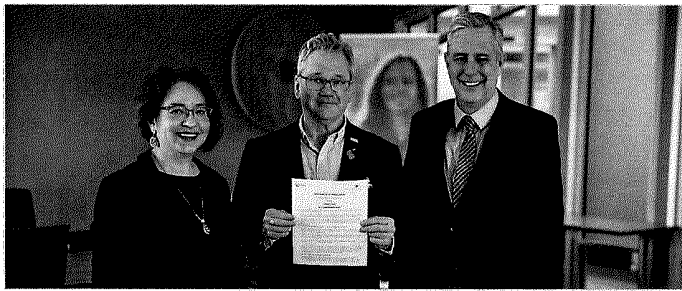


Figure 3.2: Implementation partners matrix





Representatives of SIPP and Camosun College after signing the Indigenous Smart Mobility Pilot MOU

Key contributors to the projects include:

**Funding Partners:** Supporting capital, infrastructure (hard and digital) and operational initiatives that leverage and support the \$10 million grant

Our **10 municipal partners** have listed aligned funding contributions in the form of capital and operational initiatives such as hard and digital infrastructure investments, planning, assets and alignment and collaboration across smart transportation initiatives. Private-sector investments in digital infrastructure like **Telus** will also help to achieve the project outcomes by providing a landscape for fast connectivity, data sharing and Internet of Things (IoT) solutions.

**Program Partners:** Direct contributions of in-kind materials, assets or staff time to advance our initiatives

**BC Transit** sees SMP as well-aligned with its corporate strategy to reimagine how it manages and operates services across the province. It has been engaged from the outset in the design of the projects and expects to provide key planning expertise, data and other in-kind contributions. The CEO of BC Transit sits on the Steering Committee.

The **Canadian Urban Transit Association (CUTA)** has contributed to the development of SMP and will be a key partner in implementation, significantly multiplying the impact and scale of project funding. CUTA's role is to represent the voice of the industry, to champion open systems, align their own ongoing research and development and, most importantly, ensure scalability across Canada.

The private sector is also coming to the table, including in-kind contributions from **Esri**, **Arup** and **ESP Group** to bring forward and accelerate the program implementation. If awarded the grant, this category will significantly increase with the addition of technology partners. Until now, we have remained strictly independent to ensure we adhere to open technology and data standards and to maintain community control over SMP governance and SMP design (Chapter 6).

**Funded Development and Research Partners:** Commitment to aligned research and/or funded development that can be applied to advance the SMP

**University of Victoria**, **Royal Roads University** and **Camosun College** are key partners, as they have committed to aligned research and development activities in research fields, such as Indigenous transportation networks, mobility wellness, climate change, autonomous vehicles and future transportation modes (Appendix 4).

**Privacy Dynamics Inc.** will provide data privacy experts, in conjunction with **Harvard University**, to develop a Private Data Sharing Interface prototype, which will allow scientific researchers to perform exploratory data analysis of sensitive human subject data. Privacy Dynamics will provide the hosting and operational support guidance on technology selection and development. The Harvard team brings together research expertise in differential privacy, geospatial data science and standards development.

**Collaborative Partners:** Aligned outcomes, policy and activities objectives

A substantive number of collaborative partners have also pledged their support for the SMP and have policy and programs that would benefit by its successful delivery. This list of over 80 partners includes but is not limited to governments, civil society and community groups, mobility providers, thought leaders and digital service providers, as well as international and national smart cities peers (Appendix 4).

We wish to gratefully acknowledge our collaborators and supporters for their collective contributions and their enthusiastic support of its goals.

### 3.3 LOOKING TO THE FUTURE

The diversity of our partnership team makes us resilient, as we will never be reliant on any single partner. It has also been built with the future in mind as an ongoing legacy for the region. The governance and structures we have put in place will carry on

beyond the life of the project. The PMO will serve as the foundation for the SSIIC, bringing in people and capacity to support smart mobility over the long term. We see our P3 as a model for other cities and regions, and our learnings will form part of our collaboration with our region and plans for dissemination and scalability.

### 3.4 RISK MITIGATION

Table 3.1: Risk mitigation strategies

RISK	MITIGATION STRATEGIES
Loss of community control over program outcomes and objectives Loss of community influence over planning, system design and delivery	Community engagement and aligned partnerships are central to our mandate, our P3 governance structure and our commitment to collaboration, openness and ethical practices. Based on insights from Columbus Partnership and others, we created a vendor engagement strategy to ensure we have the most flexible procurement and partnership models that do not tie us to any specific proprietary services or cookie-cutter smart city products, concurrent with the open co-design process we undertake with communities.
Continued buy-in and alignment with partners Loss of partner commitment to funding contribution Partner capacity to deliver Partner readiness and alignment to project timescales	We have a strong track record of engagement and alignment with partners established over several years and will carry that success and learnings forward into our implementation. Our governance model is being strengthened over time as more and more stakeholders perceive the value and trust in SIPP's commitment to public good. This growth has led to partnership diversity, one of our key strengths, which means we are not reliant on a single or small group of partners. Where the capacity of one partner may be weak, the excess capacity of other partners will address the gap, allowing implementation to proceed with minimal risk. From our years of working with our partners, we have a strong understanding of their engagement level, capacity and readiness and have framed our projects, project delivery structure and timelines to align with these learnings.
Changes to the political environment	With the recent municipal elections, we have fully engaged with the new councils, and have continued building our relationships with Chiefs and Councillors from local First Nations partners. Our proposal has gone before the Partners Committee and the project will be largely complete and transitioning to ongoing operations before the next election in 2022.
Emerging BC ride-hailing legislation ( <i>Passenger Transportation Amendment Act</i> )	The province is currently consulting on ride hailing and expects to introduce new legislation this year. We have advised on this consultation and will monitor the legislation as it advances. A key benefit of our approach is that it does not rely on any one form of transportation; rather, it flexibly incorporates existing transit operators and emerging or changing modes as they arise in the marketplace. This mitigates any unforeseen variables within provincial legislation.

## CHAPTER 3 LINKAGES TO OUTCOME THEMES

 <p><b>Convenience</b> Collaborative transportation partners agree to share data, improving the convenience and ease of access to different transportation modes for the end user</p>	 <p><b>Affordability</b> Operational structure can scale during implementation Partnerships provide aligned funding for lower user costs</p>	 <p><b>Wellbeing</b> Mobility Wellness Taskforce oversees the MWI through the projects to monitor outcomes and provide advice on scalability</p>	 <p><b>Inclusivity</b> Diverse membership increases stakeholder participation and promotes transparency Vigorous partnership network drives development, coordination and project management Youth Liaison Taskforce provides an opportunity for youth engagement Close collaboration with civil societies, NFPs</p>
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# CHAPTER 4

## Engagement

*"The open innovation challenges allowed us to think about how we source new ideas and innovation for our business operations differently. After the Future Innovator Challenge, we were so impressed by a team of students that we invited them to discuss their concept for an app called Bus Bank with the BC Transit team."*

– Erinn Pinkerton, CEO BC Transit & SCC Steering Committee

### 4.1 INTRODUCTION

SIPP's most significant strength, as an organization and a regional voice, is in accessing the exponential power of partnerships and collaboration. Over the past two years, SIPP has become a central facilitator of Smart Mobility transformation and a leading cohesive voice in our region. This chapter outlines the progress of SIPP's engagement activities, as well as how lessons learned and relationships built through those activities have framed our proposal and will guide our continued engagement during implementation.

Our capacity and depth as an organization enables us to meaningfully engage citizens and stakeholders, address a wide spectrum of regional issues, provide thoughtful leadership and facilitate knowledge sharing to proactively address the most pressing issues for Greater Victoria. We boast a unique strength in the "people power" behind our engagement capacity—our diverse and dedicated staff, leaders, taskforces, stakeholders and peer cities (Chapters 3 and 6) will guide and support our engagement activities during implementation.

### 4.2 SIPP ENGAGEMENT APPROACH

Over the past two years, SIPP has brought its adage "Citizen-Inspired Transformation" to life, by demonstrating our passion and commitment to co-creation, inclusive governance and citizen-focused engagement.

To date, we have used an engagement framework developed by the International Association of Public Participation (IAP2), which is comprised of five progressive engagement levels outlined below. We have put this approach into practice through all of SIPP's engagement activities, ranging from broad public forums and general awareness building, to in-depth surveys and one-on-one dialogues.

#### Engagement level

● Inform	To provide balanced and objective information in a timely manner
● Consult	To obtain feedback on analysis, issues, alternatives and decisions
● Involve	To work with the public to make sure that concerns and aspirations are considered and understood
● Collaborate	To partner with the public in each aspect of the decision making
● Empower	To place final decision-making in the hands of the public

International Association of Public Participation engagement levels

We have applied this approach with stakeholders at many levels, consulting with mayors, First Nations leaders and CEOs to often-overlooked groups such as students, who we empowered through a Youth Liaison Taskforce. We consult and collaborate to be as inclusive as possible, hosting roundtables with the Disability Resource Centre and at Camosun College with Indigenous students. We inform new residents about our projects at the Intercultural Association, a local immigrant and refugee centre. Our shared vision and our solutions are stronger when we engage together.



Camosun students at pop-up poll

### 4.3 ENGAGEMENT TO DATE

Figure 4.1 details SIPP's engagement to date, highlighting the IAP2 levels of engagement associated with these activities. This is followed, on the next page, by detailed descriptions of our activities and the insights that illustrate our capacity and committed track record to "Citizen-Inspired Transformation" and focused engagement that will drive our implementation plan.

#### Engagement statistics at a glance

##### #freedomtomove Campaign:

- Social media impressions – **355,600**
- TV / Radio impressions – **948,100**
- Website hits – **12,600**

##### Other engagement:

- Public attendance at events – **1,450**
- One-on-one engagements at Pop-up Stations – **300+**
- In-depth survey completions – **562**
- Number of posters throughout the city – **1,750**
- Smart Mobility Manifesto signatures to date – **914**
- Proposals received for Innovation Challenges – **140+**

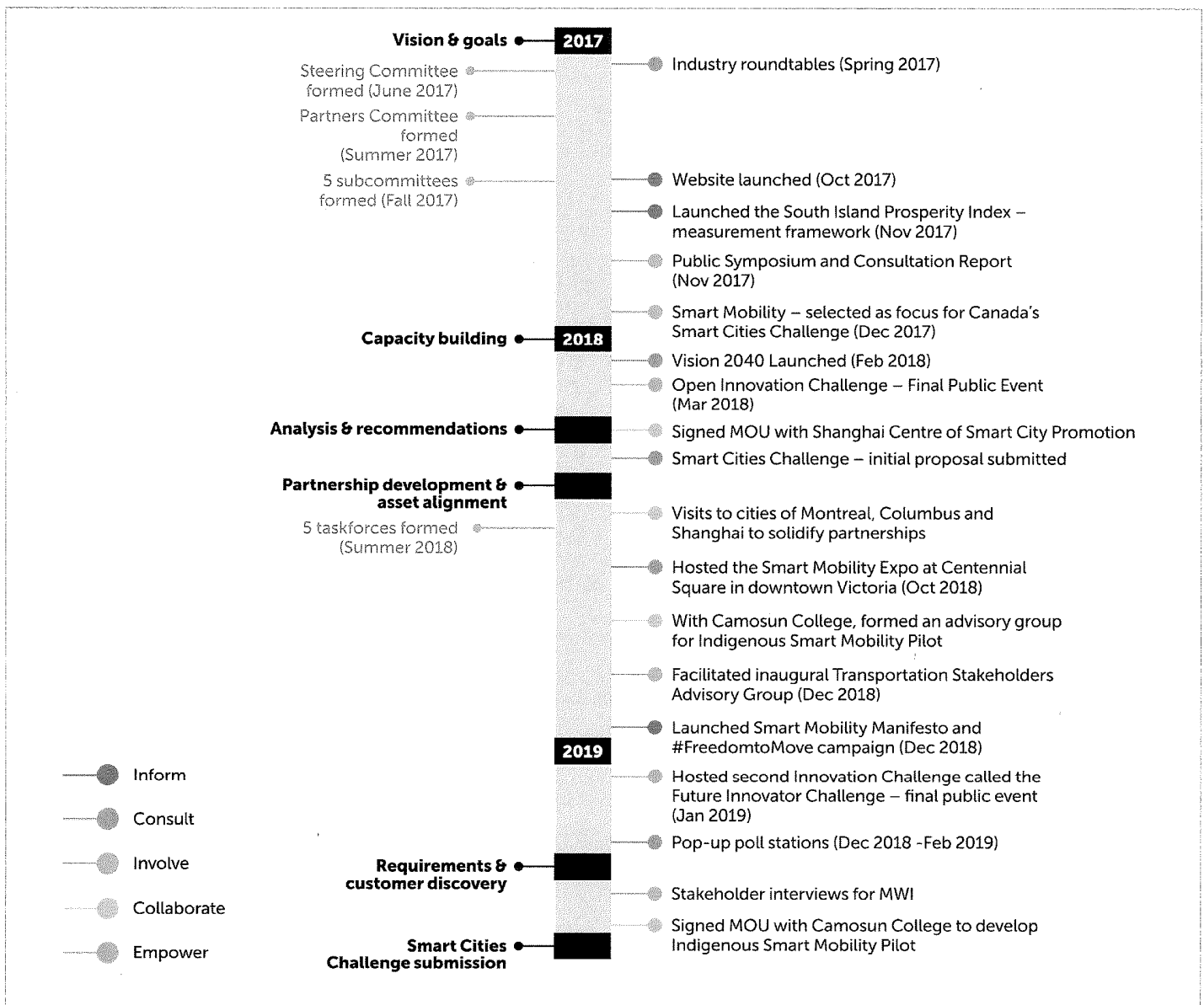


Figure 4.1: SIPP engagement timeline



## 4.3.1 DETAILED ENGAGEMENT DESCRIPTIONS

**Kick-off stakeholder roundtables:** Industry and stakeholder engagement around developing a regional strategy to promote Greater Victoria as a centre of excellence for “clean, connected and competitive cities” with the University of Victoria (UVic), yielding ideas, dialogues and engagement that informed our SCC initial submission.

**Steering Committee:** Coordinates broad outreach efforts, ensuring that all stakeholders are represented.

**Partners Committee:** Advises the Steering Committee, playing an active role in shaping and developing Vision 2040 and our SCC proposal (Chapter 3).

**Website and social media platforms:** Public engagement website launched in September 2017 ([www.smartsouthisland.ca](http://www.smartsouthisland.ca)) as a platform for involving the public in SIPP issues and initiatives. This is augmented across multiple social media platforms.

**South Island Prosperity Index:** Annual reporting index, to be updated in March 2019, provides a snapshot of the region’s wellbeing, measures progress on five outcome statements through 140 indicators (in alignment to the World Council on City Data’s ISO 37120 framework) and compares these to Canadian peer cities to add context.

**Smart South Island Public Symposium:** Public event, attended by over 350 people and facilitated by award-winning Canadian urbanist Charles Montgomery to exchange ideas with citizens and share information about the SCC challenge themes. Incorporated innovative tools such as real-time polling on smartphones to gauge opinions.

**Sub-committees:** Representing 50 organizations and active November 2017 to March 2018, engaging stakeholders and industry leaders to provide expertise, engage target audiences and refine the initial proposal.

**Open Innovation Challenge:** SIPP engaged residents as co-creators in addressing Smart City innovations related to outcome statements. Produced 69 projects over eight weeks, with 10 finalists selected by a jury. The top three finalists received \$15,000 grants, and the three projects are currently in implementation under SIPP guidance.

**SIPP Taskforces:** SIPP taskforces guided initial SCC proposal, oversees the MWI, hosted pop-up polls and special events, engaged youth (Chapter 3).

**Stakeholder and peer city consultations:** Strategic knowledge sharing with both stakeholders and international peers—including Victoria Disability Resource Centre; Intercultural Association of Victoria; Canadian National Institute for the Blind; peer cities (noted earlier); BC Office of the Privacy and Information Commissioner; BC Minister of Transportation; BC Minister of Jobs, Trade and Technology and BC Minister of Finance (August 2018–February 2019).

**Smart Mobility Expo:** Expo of over 25 vendors designed to introduce citizens to the spectrum of smart, multimodal options available now, or in the near future, including an electric ferry, smart buses, e-scooters, carshare, hoverboards and electric bikes.

**Transportation Stakeholders Advisory Group:** Convened over 30 transportation stakeholders from both public and private sectors to discuss data sharing, collaboration and regulatory policy.

**Smart Mobility Manifesto and #FreedomtoMove Campaign:** Campaign in support of SIPP’s SCC challenge statement and Smart Mobility Manifesto, collecting citizen-submitted videos using the hashtag #FreedomtoMove. Campaign included ads on buses, TV, radio, and in newspapers.

**Travel habits survey:** To understand current consumption and attitudes among a diverse range of people. Survey yielded over 500 responses over 12 weeks.

**Future Innovator Challenge:** Second innovation challenge in partnership with post-secondary and secondary schools, yielding nearly 80 student submissions. Six finalists were shortlisted and made a final live pitch to judges and the general public.

**Pop-up Polling Stations:** Yielded over 50 hours of engagement and 300 face-to-face conversations, with a focus on reaching residents who may not have access to web-based materials. Camosun College and University of Victoria were among hosts.

### 4.3.2 KEY FINDINGS

After meeting face-to-face with hundreds of citizens and stakeholders in Greater Victoria, and engaging indirectly with thousands more through surveys, campaigns and online impressions, we learned a lot about our fellow citizens and their needs, aspirations, challenges and hopes for the future. We reaffirmed how valuable citizen-inspired action is to our mission and to achieving our shared vision for a smart mobility future.

Key insights and lessons learned during our two-year engagement process now form the foundation for our SCC approach. These include the following:

#### Co-design produces meaningful direction

A broad spectrum of SIPP members and citizens actively guiding and participating in decision-making creates proof points and strong buy-in at each engagement stage. SIPP's Partners Committee plays a critical role as a connection point between each government body and the SIPP Steering Committee, ensuring smooth communication and engagement and meaningful outcomes.

By bringing a broad spectrum of transportation stakeholders together, SIPP achieved consensus on a set of data-sharing principles. From this, SIPP developed a list of 10 Principles for Emerging Multimodal Options, which was shared with the BC government to inform provincial legislation for ridesharing industries slated for fall 2019.

#### Validation from citizens

We listen, iterate and innovate through our engagement activities. Respondents to our transportation surveys contributed data and feedback that helped inform and validate the SCC proposal by affirming two critical issues:

- Our region is not sustainable along its current path.
- More and better access to transportation is the solution to this challenge.

Following the launch event of our 2017 Prosperity Index, we engaged and empowered the audience to suggest and provide guidance on how SIPP might

improve and update its next iteration. Through their involvement, we learned of citizen's strong interest in learning more about the linkages between social, environmental and human health impacts, which inspired and drove our creation of the MWI.

#### Taking advantage of new tools

We use a wide variety of smart tools in our engagement activities and will continue to learn, share, and develop new engagement tools to reach, collaborate, and connect with citizens. We used smart technology to conduct real-time polling at engagement activities, enabling us to quickly and adeptly understand our audiences, as well as to identify which citizens we were not reaching. For example, youth were underrepresented early on, which led us to create the Youth Liaison Taskforce.

Through their student-focused engagement, SIPP's Youth Liaison Taskforce identified a previously unknown need to educate high school youth about their digital rights, an issue being introduced around the world to inform, educate, and engage youth in understanding their rights and relationship to data. The Taskforce is currently developing a digital literacy information kit to share with local high schools. This is a tool that could be replicated and scaled for use across many jurisdictions to foster "smart citizens" from an early age.



The Youth Liaison Taskforce discussing smart mobility and regional transportation issues with University of Victoria students



## Engagement objectives

1. Ensure the long-term viability of the program
2. Ensure that diversity and inclusion goals are met and that all residents, including those most underrepresented, feel that their voices can shape the projects
3. Enlist residents as co-designers of projects
4. Ensure that partners provide input at key stages of implementation
5. Ensure that governments (at both political and staff levels) are consulted at appropriate stages of implementation
6. Ensure that ongoing engagement is embedded into project design

### Readiness for Indigenous Smart Mobility Pilot

Through close consultation with First Nations communities, education facilities—Camosun College, Saanich Adult Education Centre (SAEC) and University of Victoria—we have been able to engage Songhees First Nations, Beecher Bay and SAEC to survey students on their travel patterns and how this aligns with the current transport services. Through this engagement with multiple First Nations communities, we have been able to secure the use of existing community-owned and -operated vehicle assets (community buses, vans, personal-use vehicles) to be used for the Indigenous Smart Mobility Pilot. The level of coordination and collaboration is a testament to the shared vision that these communities have, to improve the mobility options available to their students and residents.

BC Transit has also offered driver training to those communities for the pilot further demonstrating the engagement and collaboration that has been performed to make this a reality.

### 4.4 ENGAGEMENT PLAN FOR IMPLEMENTATION PHASE

The following engagement plan for our implementation phase ensures that our process builds on the co-design approach and focuses on diversity, inclusion and equity, while remaining accessible to everyone across the region. Our engagement objectives (see above) will be the lens through which we plan, develop and make decisions regarding our engagement and outreach activities. We will encourage our partners and co-designers to do the

same as we advance our decisions and designs and move into implementation.

#### 4.4.1 TARGET ENGAGEMENT GROUPS

Building on our activities to date, engagement of a broad cross section of Greater Victoria residents will be critical to driving program implementation. However, we will prioritize our three co-design target groups (Indigenous students, seniors and new employees) throughout our implementation engagement plan.

This section highlights the primary groups we intend to engage during the implementation phase. A comprehensive list of implementation partners, who are critical to achieving our outcomes, can be found in Chapter 3 and Appendix 3.

#### 4.4.2 STAKEHOLDERS AND PROJECT PARTNERS

To ensure effective design, development and implementation of all project components, SIPP will engage stakeholders and partners that span a variety of disciplines. They are outlined in general categories below as they relate to our engagement plan. A comprehensive list of our implementation partners, who are critical to our engagement initiatives, can be found in Chapter 3 and Appendix 3.

#### 4.4.3 GOVERNMENT PARTNERS

SIPP's government partners are crucial to our organization, as well as to our engagement and implementation plans. To ensure that project design and implementation are coordinated with both existing and future infrastructure or investments, local municipal and First Nations communities will

be consulted through various engagement activities across all project stages. Beyond SIPP's existing government partners, we will focus our engagement on government ministries, agencies and institutions that have a role within the mobility and transportation industries. We aim to use smart city funding at critical moments, to align with provincial government funding opportunities and to identify when and how we can best align our projects alongside BC Government initiatives and opportunities.

## 4.5 ENGAGEMENT METHODOLOGIES

This section highlights how, when and at what levels we intend to engage with our citizens and stakeholders during the implementation phase.

### 4.5.1 KEY ENGAGEMENT DESIGN PRINCIPLES:

- **Lead with diversity:** SIPP's citizen-inspired approach and diverse governance model is designed to maximize inclusiveness of residents and stakeholders, ensuring our design process and projects benefit a wide variety of people including those who are often underrepresented. SIPP has received international recognition for its governance model.
- **Engage across the whole spectrum:** We go beyond traditional levels of consultation and embrace direct participation. SIPP has piloted two open innovation challenge competitions and incorporated this approach into the SSIIC.
- **Co-design:** Because SIPP's experience with co-design, and our plans to continue to use it throughout implementation, we are confident we can deliver better and more inclusive ways to achieve our outcomes (Chapter 6).
- **Measure early and often:** Engagement is a key component of social outcomes. SIPP's MWI is an ongoing engagement and measurement tool. Users will be able to submit feedback about journey satisfaction, access information to inform decision-making and access data that helps gauge willingness to change modes or behaviour. By tracking these metrics—from user engagement to their journeys and mode shifts—we will establish a method of measuring and achieving outcomes.

### 4.5.2 ENGAGEMENT ACTIVITIES

Our challenge theme “freedom to move” anchors our vision for a shared mobility future in Greater Victoria that is designed by and for citizens and as a result, provides a vibrant, innovative and measurable approach to engagement with our communities.

**Key Activity:** Ongoing guidance and leadership

**Steering Committee:** The Steering Committee will be expanded during SCC implementation to ensure a broad and diverse group of stakeholders are contributing to critical decisions at key Stage Gates and on issues of specific interest or expertise.

**Partners Committee:** Municipal and First Nations leaders will continue to be engaged through this committee. It remains an effective way to liaise with multiple governments at once at critical Stage Gates.

**Engagement levels:** Inform, consult, involve

**Key Activity:** Public and stakeholder engagement

**Webpage:** SIPP will maintain the Smart South Island website through all phases of implementation to build awareness for the SMP so we can establish baselines for addressing behavioural changes that will improve outcomes.

**Smart Mobility Manifesto and multimedia campaign:** This multimedia campaign will continue to roll out over the coming months as the region prepares for implementation. Awareness will be key to deeper levels of engagement during the implementation phase. Other cities, including Montreal and Columbus, have expressed interest in adopting this Manifesto as a ready-to-implement toolkit.

**South Island Prosperity Index:** This regionwide annual report card is an annual opportunity for SIPP to report on overall progress of Smart South Island, along with the macro-indicators about the region's progress toward Vision 2040.

**Engagement levels:**  
Inform, involve, collaborate, empower



## Key Activity: Engagement through co-design

### Project 1: Integrated MaaS

We will conduct initial engagement activities with the three co-design target groups (and relevant partners including WSÁNEĆ School Board and First Nations governments, senior service centres, the Disability Resource Centre and the Intercultural Association) through focus groups, followed by beta-testing groups to provide active co-design inputs to the service and technology developers.

### Project 2: STP

Engagement will involve multiple touch points but primarily will focus on the three co-design target groups.

### Mobility Wellness Index

The first iteration (March 2019) will present the framework, as well as showcase the dynamic indicators that will be developed in the future. This version will be used to capture feedback from various target audiences through focus group sessions, going beyond the engagement activities described above that were used to design the beta MWI.

On an ongoing basis, MWI will become the primary tool that will allow residents to better understand their mobility experience and influence behavioural change (for example, features that show how their wellness has improved or their carbon footprint has been reduced through their mobility choices). Journey satisfaction and other data will be used to determine baselines and shortcomings of the mobility system and will inform policy and planning decisions.

**Engagement levels:** Involve, collaborate, empower

Key Activity: Ongoing consultation and citizen-led innovation

### Project 3: SSIIC

Through the SSIIC, a diverse range of projects can be nurtured from ideation through to concept, to pilot and eventual scaling all while building public capacity and empowering our citizens.

**Engagement levels:** Consult, collaborate, empower

## 4.6 DIVERSITY AND INCLUSION FRAMEWORK

Beginning in 2017, we sought to understand the stories of people in our community who are disadvantaged and underserved by our current transportation system (see co-design target groups in Chapter 1). Building a regional transportation network that serves everyone requires a profound understanding of how certain groups are excluded. As explored throughout this chapter, SIPP is addressing this issue head-on by co-designing the early iterations of the MaaS solution alongside our three co-design target groups, before scaling solutions up to serve broader sets of users that face similar challenges (Chapter 1).

### 4.6.1 CO-DESIGN TARGET GROUPS: CONTEXT AND SCALE

**Indigenous students:** There are 10 First Nations communities and 17,245 Indigenous people on South Vancouver Island. Only two of the 10 reserves are close enough to the urban centre to access education and career opportunities off-reserve. The other eight are rural, remote and not served by public transit; their residents have less access to education and career opportunities, and spend a higher percentage of household income on transportation.

**Scale:** Engage to test and scale to other rural and remote populations regionally and nationally.

**Seniors:** As a popular retirement destination, Greater Victoria is home to an aging population that is far greater than other cities (21.1% of our citizens are over age 65, compared to the national average of 16.1%).

**Scale:** Engage to test and scale to other unique mobility users, who—if offered reliable, customized and convenient mobility options—would make more recreational and social trips (such as citizens with mobility challenges or accessibility needs).

**New Employees:** New employees encompass a significant percentage of people moving into Greater Victoria. These include, but are not limited to, Canadians moving in from other areas, immigrants, new students, and others who are

## Engagement

just arriving in Greater Victoria. We must engage and embrace new residents in our communities and workforces to maintain our region's strong economic competitiveness.




**Scale:** By meeting the unique mobility, information and engagement needs of new residents, we can scale to other populations, like our region's large international student population for example, as they would benefit similarly.

### 4.7 RISK MITIGATION

Table 4.1: Risk mitigation strategies

RISK	MITIGATION STRATEGIES
Lack of trust between target stakeholders/ partners/ governments	SIPP's inclusive governance model has representation from a diversity of groups as members who will be engaged fully throughout implementation. We will continue the efforts that have been made throughout the process to build long-term relationships and trust by consistently engaging, building in time for continuous communication, reporting back on results and allowing time for validation of results.
Difficulty engaging the general public on highly technical content	We will invest time in translating complex technical content into accessible engagement materials. By developing clear key messages and breaking down complex ideas, we will ensure the public remains engaged and interested. We will also enlist our co-design target groups to create public-facing content that is more palatable to their user groups and to general audiences.
Our co-design target groups face barriers to participation	We will work with project partners to understand the barriers these groups may face in engaging with our work. We will reduce these barriers where possible (i.e. travel subsidies, accessible venues, accessible materials, online and in-person, etc.). In other words, we will 'meet them where they are at' in both physical space and capacity to engage.
Perception that decisions are being made behind closed doors	The results of our engagement activities will be communicated back to participants (and made public) in summary reports that highlight what was heard and how it influenced decision-making. SIPP's governance structure is built on collaboration and having many voices around the table. We will clearly communicate who is making decisions and how they are being made. The SSIIIC will also encourage transparency and discovery.
Overlapping and potentially conflicting interests of numerous partners or tensions between user groups/perception of inequality	SIPP's governance model is independent and often coordinates the shared interests of its members. SIPP is viewed as an "arms-length" organization, meaning its structure as a public-private partnership enables it to act on behalf of the public good and is not beholden to any particular group(s).
Certain voices dominate the process	We will maintain contact lists, track participation and categorize information shared (disaggregating for co-design target groups and gender) to help us understand who is participating, whose perspectives we are missing, and how the issues and needs of different stakeholder types differ. We will engage our co-design target groups in each stage of implementation to ensure diverse and inclusive voices are not just included but are meaningfully incorporated throughout.
Expectations that mobility projects will immediately solve the region's transportation issues	We will manage expectations by communicating and reporting regularly on expected outcomes and timelines in a transparent and realistic way through our engagement materials and through SSIIIC and by measuring our progress with our identified performance measurement tools and standards (Chapter 7).

## CHAPTER 4 LINKAGES TO OUTCOME THEMES

 <p><b>Affordability</b></p> <p>Engaged Songhees and Sc'ianew Nations and SAEC to coordinate existing vehicle assets for the Indigenous Smart Mobility Pilot to keep costs down</p>	 <p><b>Wellbeing</b></p> <p>The Youth Liaison Taskforce is developing a digital literacy kit for local high schools that could be replicated in other cities</p> <p>MWI ongoing engagement and measurement to gauge wellbeing through both quantitative but also, highly engaging 'gamification' methods to collect qualitative data and influence behavioural change</p>	 <p><b>Inclusivity</b></p> <p>The collaborative inclusive membership model</p> <p>SIPP's many engagement activities have involved diverse people and perspectives and have informed us on gaps and future engagement plans</p>
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# CHAPTER 5

## Data and Privacy

*"Data has the power to transform our communities, but only when it is valued less as a commodity and more for its potential to improve citizens' lives. This is the driving ethos of our Smart South Island Inspiration Centre."*

– Mike Palmer, Co-Chair SCC, Data and Privacy Taskforce,  
Chief Information Officer, City of Victoria

### 5.1 DATA AND OUR PROJECTS

Data are fundamental to the success of the three projects in the SMP. The integration of transport data throughout our projects will enable Greater Victoria residents to make more convenient, affordable and green mobility choices. Data from these transport operators, combined with other civic data sources in the SSIIC, will provide input into the MWI, which allows us to monitor progress towards our outcome statements (Chapter 1). It will also help citizens, planners and decision makers in local communities to understand the impacts of transport on broader outcomes. Over time, the sharing and integration of

regional transport, demographic and environmental data can drive the development of technological innovation and community-owned solutions here in Greater Victoria.

As described in Chapter 2, the SSIIC will integrate data to enable two primary use cases: for MaaS and for visualization and analysis. Table 5.1 outlines the data that we plan to integrate into the SSIIC, describing the owner, availability and use case, as well as when we plan to integrate this data (aligned with the Stage Gate approach described in Chapter 6).



Stakeholder workshop on MaaS, privacy and data sharing

Table 5.1: Data sources for SMP projects (preliminary list)

Owner	Data	Availability	MaaS	Analysis / Visualization	Stage Gate
BC Transit	Transit routes and schedules	Open	☑	☑	1
	Real-time vehicle location	Open	☑	☑	1
	Passenger counts by route	Public		☑	2
	Current fares	Open	☑	☑	1
BC Ferries	Routes and schedules	Open	☑	☑	1
	GPS ferry location	Public	☑	☑	2
	Booking platform	Private	☑		3
Taxis	Real-time taxi location	Private	☑		2
	Booking + payment platform	Private	☑		2
	Number of trips by origin-destination	Private		☑	3
	Travel time from origin to other locations	Private		☑	3
Uber/Lyft	Real-time vehicle locations	Private	☑		2
	Booking + payment platform	Private	☑		2
	Number of trips by origin-destination	Private		☑	3
	Travel time from origin to other locations	Private		☑	3
Modo (Carshare)	Car location map	Private	☑	☑	1
	Booking + payment platform	Private	☑		2
U-bicycle (Bikeshare)	Bike location + real-time availability	Private	☑	☑	1
	Booking + payment platform	Private	☑		2
Capital Region District (CRD)	Cycling routes in Greater Victoria	Open	☑		1
	Traffic counts	Open		☑	1
City of Victoria	Parking locations	Open	☑		1
	Booking + payment platform (ParkVictoria)	Public	☑		2
	Traffic counts + speeds	Open		☑	1
Statistics Canada	Population by census tract	Public		☑	2
	Household spending	Public		☑	2
Municipalities	Employment locations	Public		☑	2
	Community amenities	Open		☑	1
Insurance Company of British Columbia (ICBC)	Licensed vehicles in Victoria	Private		☑	2
Victoria Real Estate Board	House prices	Private		☑	3
Environment Canada	Daily weather	Open		☑	1



### 5.1.1 BIG DATA, OPEN DATA AND SHARING

As described in Table 5.1, some of these data sources are readily available as open data. We are prioritizing the use of open data during Stage Gate 1 to deliver an initial product quickly. We will encourage the use of open data and international standards for sharing transport information (such as General Transit Feed Specification, or open data feeds for transit schedules and fares), as this makes our work interoperable, scalable and replicable with other regions across Canada and beyond.

Our projects also rely on public and private data that are not currently open but are owned by transit operators, government or other third-party organizations. In these cases, we are ready to engage and partner with these organizations to enter into a data sharing agreement so that their data can be made openly available to the public. We will also develop data access agreements for third-party

organizations who wish to use the data to develop MaaS or other transportation applications as part of the SMP. Citizens, researchers, planners and analysts may also access the data through an appropriate open data license (such as Open Government License or Creative Commons License). Figure 5.1 illustrates the relationship between data providers and consumers from a data and organizational perspective.

By integrating these data sources into a common platform that is open and accessible, the SSIIC will be an invaluable component to the SMP, as it can be used to combine different datasets together to consistently update the MWI and derive new insights into mobility and communities. The SSIIC will house tools for citizens to perform this analysis themselves (Chapter 2), enabling citizen-inspired solutions through innovation and entrepreneurship. Table 5.2 shows a selection of insights that could be derived by combining multiple data sources.

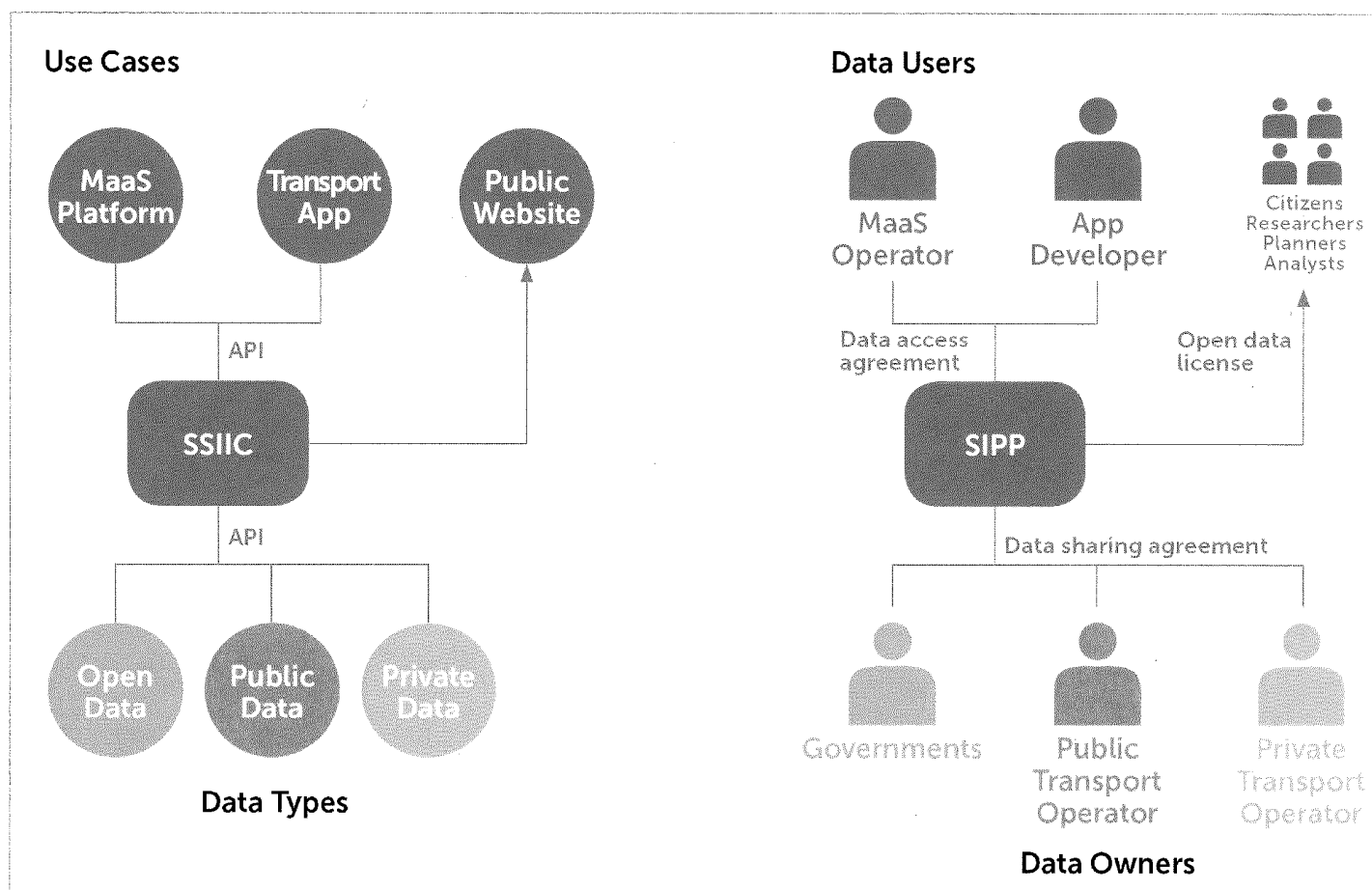


Figure 5.1: Types of data, owners, users and agreements

Table 5.2: Sample insights generated from big and open data

Outcome	Insight	Datasets
Convenience	Amenities accessible within 30 minutes by transit or cycling	<ul style="list-style-type: none"> <li>• Amenity locations</li> <li>• Transit routes and schedules</li> <li>• Cycling network</li> </ul>
Affordability	Average cost to travel by car or transit to downtown Victoria	<ul style="list-style-type: none"> <li>• Transit routes and fares</li> <li>• Road network and distances</li> <li>• Average fuel prices</li> </ul>
Wellbeing	Mode shift by trips to cycling, walking, transit	<ul style="list-style-type: none"> <li>• Cycling trip counts</li> <li>• Walking trip counts</li> <li>• Transit ridership by route</li> </ul>
Green	Change in car trips compared to current population	<ul style="list-style-type: none"> <li>• Average yearly daily traffic counts</li> <li>• South Island population</li> </ul>
Inclusivity	Jobs accessible within 30 minutes of First Nations reserves by transit	<ul style="list-style-type: none"> <li>• Employment locations</li> <li>• Transit routes and schedules</li> <li>• First Nations locations</li> </ul>

### 5.1.2 DATA COLLECTED FOR MAAS AND STP

To enable the desired functionality for the MaaS and STP we will collect, store and process personal data (as shown in Table 5.3) in line with our data management plan and policy (described in the following section). We will explain clearly to users why we are collecting their personal information.

## 5.2 DATA AND PRIVACY PLAN

Having a clear plan and approach to data management increases confidence of users, data sharing partners and the public that their data and privacy will be protected. This section outlines our data management plan, through the lens of all three projects and the MWI. We describe our data policy and principles in line with best practices and outline how these meet the relevant data and privacy legislations within British Columbia and Canada.

The data used within this project will follow these principles:

- Accessible to the public through SSIIC
- Publicly sourced and community-owned (not owned by the private sector)
- Collected, used and disclosed through transparent consent
- Volume of data shall be minimized and de-identified
- Stored and transmitted securely under assurance of effective cybersecurity

Adhering to these principles will support the transferability and replicability of the projects and associated technologies.

### 5.2.1 DATA TRUST, GOVERNANCE AND OWNERSHIP

A data trust is a mutual organization formed to provide governance, decision-making and oversight on critical issues regarding the management of data. Our data trust will consist of a group of mixed stakeholders, comprised of representatives from the public and private sectors, as well as implementation partners and citizens. This diversity will help keep data policy interpretation open and able to be challenged from different viewpoints. This is also a way of extending control over data to the users from which it is gathered, reinforcing the principle of being community-owned.

The data trust will conduct regular reviews to oversee changes pertaining to individual aspects of the data lifecycle: generation, storage, reuse, redistribution and archiving of data. The outcomes of these reviews are imperative to holding external organizations accountable. The reviews will allow for regular engagement throughout the progression of the three projects and will prevent private-sector ownership, thus maintaining community-owned and -controlled data approaches to publicly sourced data.



Table 5.3: Data collected through MaaS and STP

Data	Examples	How is this collected?	Why are we collecting this information?
Name	First + last name	Users provide when they sign up for a MaaS account	To associate an account with a person
Credentials	Username + password	Users provide when they sign up for a MaaS account	To allow a user to securely access the service
Contact information	Email address, phone number	Users provide when they sign up for a MaaS account	To enable communication with the user in order to inform of any cancellations to a booked journey, invite to co-design sessions or to inform of updates to terms and conditions or the privacy policy.
Demographic information	Age, user group, preferences	Users provide when they sign up for a MaaS account	To enable personalization of the transportation options and fares (e.g. a lower fare may be shown for seniors)
Location	Trip origin + destination and route	Through the app interface when a trip is booked and via GPS during the duration of the trip	To understand (in aggregate) the travel behaviour and patterns in Greater Victoria and to populate a journey plan/ booking request
Mode choice	Transit versus other options	Through the app interface when a trip is booked	To understand (in aggregate) the travel behaviour and patterns in Greater Victoria and to populate a journey plan/ booking request
Payment data	Debit/credit card or bank information	Users provide when they pay for a trip using the MaaS account	To allow the user to pay for trips directly through the MaaS service and to enable quicker 'checkout' (with securely stored payment token)
User feedback	Trip satisfaction, stated wellbeing	Through the app interface, during or following a trip	To understand how a specific trip affects wellbeing

Additionally, we will appoint a Data Privacy Lead (also a member of the Data Trust) to enforce compliance with privacy regulations. Through this strategy, SIPP will act in the public's best interest and hence build trust.

### 5.2.2 CONSENT

It is imperative to be transparent when obtaining consent for data. In compliance with privacy regulations, to obtain meaningful consent organizations must inform users of the purpose of data collection, the data retention period, how and to whom the data will be transmitted and, outlined in clear terms, the data subject's rights to the control of their own data (access, erasure, update, etc.).

The strategy involves always pursuing the least privacy-invasive alternative wherever possible, minimizing the data collected, and anonymizing all

personal information at the earliest opportunity, while mitigating the potential for re-identification. The data should be used to improve the three projects and the MWI and will only be stored for as long as deemed necessary for improvements or updating of the initiatives outlined in our initial SCC proposal.

We will hire a third-party company that is highly competent at anonymizing collected data and ensuring the anonymized data containing Personally Identifiable Information (PII) cannot be re-identified when disseminated. We assume that existing data outside of our ownership and collection complies with privacy regulations as appropriate.

The open data policy invites the public to contribute data through openness and transparency. This data will be used to drive community-owned solutions such as MWI and inform strategic and regional plans.

### 5.2.3 SECURITY

Cybersecurity is a critical component of the MaaS and SSIIC platforms, which involve PII. Within the SMP, users can expose their PII knowing with confidence that it 1) is only being accessed by trusted and vetted third-party partners, 2) is encrypted and 3) is accessibly only through two-factor authentication.

Our system will deploy security solutions through the following methods, which address trusted vendor and customer relationships, encrypted PII and human error:

1. **Trusted suppliers and customers:** Third parties will need to have access to our data platform to create and deliver value to the citizens of Greater Victoria. Traditional security solutions using IP-based identification have been proven by cyber criminals to be easy to defeat. SIPP will implement a DNS firewall that our networks can only communicate with the domains of trusted suppliers and customers on an established domain white list. Everything else will be blocked.
2. **Encryption triad:** There are three stages of data encryption: 1) at rest, 2) in transit and 3) in use. SIPP will work to implement all three phases of encryption of the PII data. Nation State attacks are usually successful when data is In Use. Until recently, processing power and technology has been a limiting factor for In Use encryption. With the emergence of Homographic security, SIPP will ensure that In Use data is always encrypted.
3. **Multifactor authentication (MFA):** Google and European banks have mandated the use of MFA. Humans are the greatest risk to a network, and MFA prevents credential theft from occurring. For example, users must complete a login process by entering a code sent to their mobile phone.

Beyond the technical elements of our privacy protection scheme, the Data Privacy Lead will ensure all attempted breaches are reviewed to continually monitor our security profile.

### 5.2.4 DATA AND PRIVACY REGIMES

As SIPP is a NFP organization within British Columbia, we are regulated by the BC Personal Information Protection Act (PIPA). This act balances individual rights to protect personal information with an organization's need to collect, use or disclose it. We have developed our data management plan to meet this standard (5.2 Data and Privacy Plan). Within Appendix 2, we include our preliminary Privacy Impact Assessment (PIA), which was prepared in consultation with the Office of the Information and Privacy Commissioner for BC.



Only trusted third-party partners will have access to users' PII.



Table 5.4: Data privacy principles and our plan for compliance

Privacy principle	How will we comply?
Accountability	The Data Privacy Lead will be responsible for compliance with applicable privacy legislations, as well as for handling access requests and privacy complaints. We will make the name and contact information of this individual public.
Identifying the reasonable purpose	We will identify the reasonable purpose for the collection, use or disclosure of personal information that is required to deliver the services developed for the projects. We will use clear, understandable language to notify individuals of the purpose.
Consent	We will clearly and concisely notify users of the purpose of data collection through an easy-to-understand privacy statement and end-user license agreement. Individuals will provide express consent (through the website or app) prior to using the service and can withdraw consent at any time.
Limiting collection	We will ensure that the information collected will be limited to the purposes identified before or at the time of collection.
Limiting use, disclosure, retention	We will limit the use, disclosure and retention of personal information to what has been consented to or to what is allowable under PIPA. We will notify and request consent from individuals should the purpose change. We will limit retention for as long as required. This will be reviewed by the Data Trust.
Accuracy and correction	The collected personal information will be kept accurate, complete and up-to-date as possible to satisfy the purposes for which it is collected. We will correct errors or omissions to personal information as requested by individuals. We will provide users with the ability to update their own profile.
Protection and safeguards	We will build data protection into the core design of all systems, rather than as an addition at a later stage. We will use state of the art data anonymization methods such as differential privacy, geomasking, and k-anonymity to preserve privacy throughout the collection, storage, and use of all data containing PII.
Individual access	An individual can challenge or amend information as appropriate. The individual can also be informed of the existence, use and disclosure of personal information and given access per request. We will provide an electronic copy of personal data and/or any supplementary information to participants as requested.
Challenging compliance	We will provide a simple form for users to communicate any questions, concerns or complaints related to their personal information. An individual may complain to the Office of the Information and Privacy Commissioner should we fail to meet our obligations. We will cooperate with the Commissioner's Office.
Openness	We will ensure our policies and practices relating to the management of personal information are publicly and readily available through web platforms and apps. Citizens can also request information from our Data Privacy Lead.



We will engage citizens in 'hackathons' to help develop solutions for problems identified by data in the SSIIC.

### 5.3 RISK MITIGATION

Table 5.5: Risk mitigation strategies

RISK	MITIGATION STRATEGIES
Loss of public trust or negative public perception over nature of data openness uses related to projects and data privacy standards	We have developed an engagement plan to keep the public informed and engaged along the journey (Chapter 4). The co-design process ensures that touchpoints and processes both comply with legislation and best practice but also produce trust and confidence in users' terms. Each service will have a unique set of Terms and Conditions and a privacy policy (which conforms to the applicable data protection laws of the operating country) with the co-design group helping to ensure these terms are accessible and understood by the target audience.
Vulnerability against breaches, damage as a result of potential data breach	Enforce data sharing partners (municipalities, industries, mobility service providers, etc.) to be compliant with the applicable regulation. The data-trust is will be independent, treating all parties equally, and will conduct thorough reviews for robustness of partner companies' cybersecurity policies, processes, procedures and readiness.
Possible re-identification of data	Hire a third-party company who is highly competent at anonymizing collected data and ensuring anonymous PII. The data-trust plans to incorporate or adhere to new data privacy standards, tools and practices as they emerge, which could include incorporation of self-sovereign identity or blockchain authenticated identity.
Security of collected PII data	Implement physical, administrative and technical safeguards to minimize access to personal information. This includes the separate storage of data by classification into a tiered system. Access will only be provided to individuals as required for the identified purpose of delivering the services.

## CHAPTER 5 LINKAGES TO OUTCOME THEMES



### Convenience

Access to open and big data makes MaaS solution more convenient for users



### Wellbeing

Data from transport operators, combined with other civic data sources in the SSIIC, will provide input into the MWI, which allows us to monitor progress towards our outcome statements

Data will be used to drive community-owned solutions such as MWI and inform strategic and regional plans



### Inclusivity

The SSIIC will house resources for citizens to perform this analysis themselves enabling citizen-inspired solutions through innovation and entrepreneurship

The open data policy invites the public to contribute data through openness and transparency



# CHAPTER 6

## Project Management

"It's a bad plan that admits of no modification."

– Publilius Syrus

### 6.1 INTRODUCTION AND APPROACH

Complex, innovative projects with sub-projects and multiple stakeholders can deliver breakthrough results. At the same time, they are also subject to a host of challenges such as schedule slip, insufficient customer connection and coordination challenges between stakeholders and siloed sub-projects.

To avoid these issues and ensure success, we will employ aspects of the Scaled Agile Framework (SAFe) to our projects. The SAFe approach promotes alignment and collaboration between teams and stakeholders, which in turn helps ensure our desired

outcomes for the design and implementation across the three project teams. It applies lean innovation concepts and ensures early and frequent customer involvement, rapid and continuous iteration and validated learning through constant end-user engagement and iterative design.

As an innovative addition to SAFe, we have developed an Outcomes-Based Project Feedback Loop (Figure 6.1), which combines a Stage Gate approach (divided into key milestones in program delivery and evaluation) with SAFe principles.

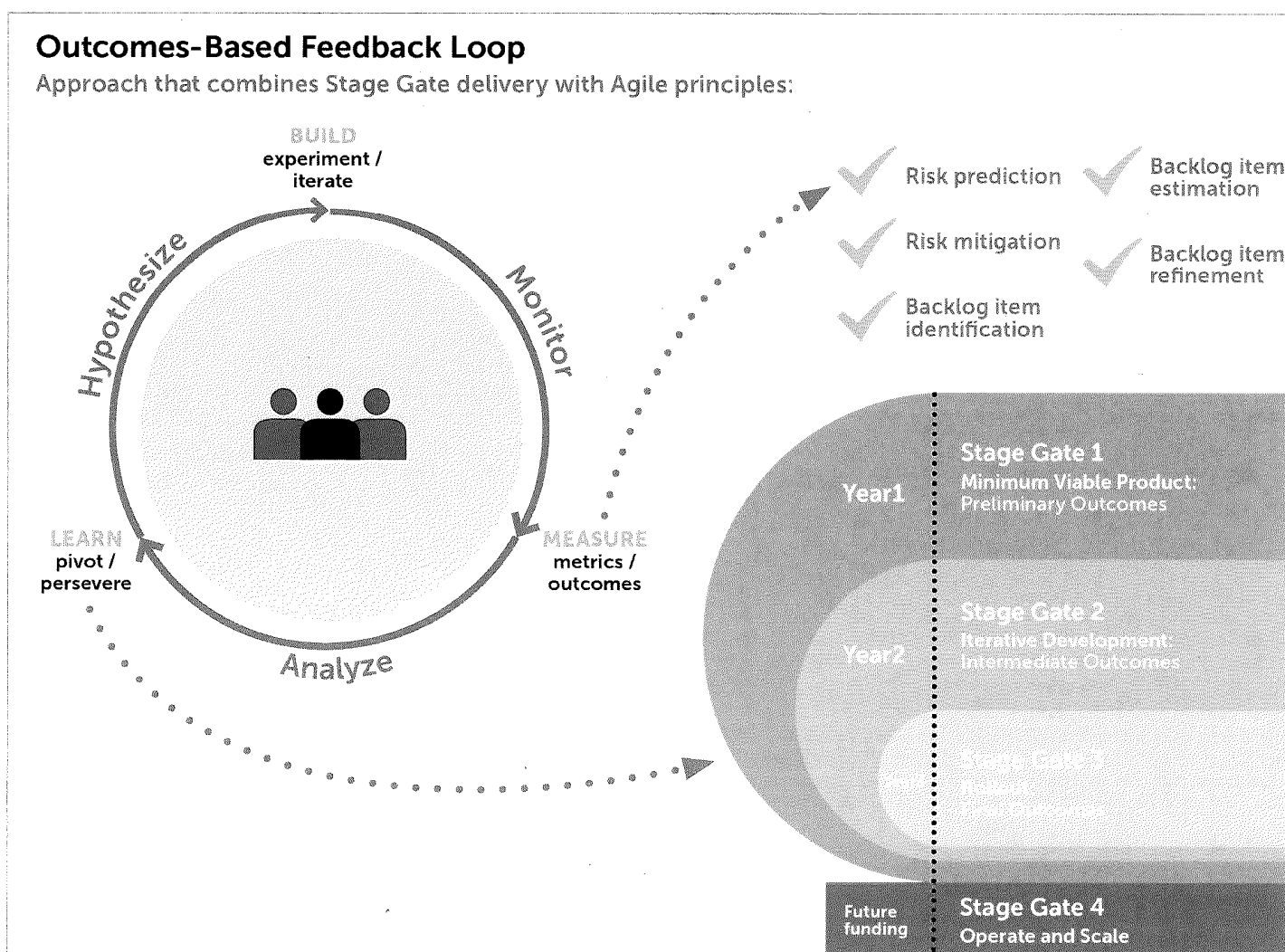


Figure 6.1: Outcomes-Based Feedback Loop

This ensures we deliver frequent releases to our customers, while also ensuring we deliver on our longer-term program outcomes. This concept will be further elaborated below.

### 6.1.1 PROGRAM MANAGEMENT OFFICE

To manage the SMP we will establish a Program Management Office (PMO). The PMO will run quarterly sprint review and planning sessions to discuss project progress to ensure alignment across the three project teams around agreed outcomes for the next quarter. These sessions will bring together the three project teams, along with the key stakeholders, to both review and align design and development and to plan the next iteration. This protocol will help to manage risk and dependency between the projects. To successfully deliver, we will incorporate the following into our project plans:

- The full range of services/functionality to be delivered in each project
- The dependencies that exist between the projects, highlighting the critical path
- Technology and non-technology deliverables
- Resource needs and readiness for human resources, assets/materials and workforce capacity
- Any related initiatives already underway
- Management of the key stakeholders, delivery partners and the procurement process
- Reporting and communications plans to ensure individual projects are on track
- Risk management to work through known risks and use our Stage Gate and iterative design approach to identify and mitigate unknown risks

We will run a series of sprint reviews to demonstrate progress at each quarter to all stakeholders. In the early stages, these sprints will be vital to developing the minimal viable product (MVP), providing the teams with quick progress updates to decide to continue on the current path (persevere) or to review and reassess our concepts (pivot). Each project team will provide its product demonstrations in the same session, breeding cross-team alignment, early identification of risks, budgetary impacts and dependencies, as well as effective communication with stakeholders, the PMO and the Steering Committee.

This hybrid project management framework (SAFe with the Outcomes-Based Feedback Loop) builds consensus in advance at planned stages; each Stage Gate is delivered as an increment of the overall program, with a unified outcome in mind. Through regular iterative rollouts, the project teams will expedite development and improve predictability for future iterations.



Our PMO and Steering Committee will run quarterly sprint reviews.

### 6.1.2 CITIZEN-INSPIRED TRANSFORMATION

We recognize that ‘no business plan survives the first encounter with the customer’ as a warning that our process must maintain the customer at the core of our project management process. In fact, our motto "Citizen-Inspired Transformation" compels us to ensure that we hold this ideal true in all our actions—from engagement, vision setting and, of course, project management.

We will honour these commitments via our dedication to co-design target groups (through workshops, user story mapping and beta testing) to ensure that customer-valued features will be prioritized. As the costs of a missed feature increase exponentially through a project’s lifetime, we expect to build quick, learn quickly and adapt quickly, which will ultimately pay dividends downstream as we scale to larger audiences. Hence, we have chosen three co-design target groups to focus on, deliver value, and ultimately move to adjacent, broader groups and applications.



While some components of our projects will allow for direct connection to customers in real time, many others will require beta group feedback with selected group of advanced customers. This high-trust relationship helps ensure that new project features, systems, and services can go through early testing and evaluation in advance of broader release.

At key points in the project (major release cycles), we will lock features and capabilities to create the deliverables and functionality at each Stage Gate. This will provide the project management team a chance to analyze and measure outcomes, with a view to either pivot or persevere with the design and functionality.

The diverse set of professional skills required to deliver these projects is a significant resource requirement. We will need project team resources as well as engaged stakeholders and community members to participate in pilot programs. We will manage these resources through a rigorous stakeholder analysis, which identifies the resources available (people, assets, intellectual property, technology and non-technology functions) and how they can be best deployed in the development of the projects.

Through our robust partnership network, we have identified qualified resources and partners for all aspects of the project. We will engage in open procurement processes to secure the best resources

and best-in-class solutions, while maintaining the strongest attention to the key attributes of the projects: open data models, open technology frameworks and sustainable and transferable solutions. At the same time, we are not beholden to any one specific path or partner and can therefore pivot from one supplier to another if required.

## 6.2 SCOPE, SCHEDULE, SEQUENCING AND DEPENDENCIES

The scope of the three projects that comprise the SMP are detailed in the Vision and Technology chapters. Table 6.1 outlines the level of functionality that we plan to achieve and deliver by the end of each Stage Gate. The outputs delivered in the first Stage Gate are initially limited in functionality, as during Stage Gate 1 we will deliver a minimum viable product. We will take lessons learned from users and the co-design target groups to deliver new functionality and scale to more markets within later Stage Gates.

Concurrent with this work, we will also develop the guidance documents with best practice, templates, and materials to formalize our learnings and serve as a basis for knowledge transfer and scaling across Canada, as discussed in Chapter 2. Specifically, we will develop an MWI Toolkit, Co-design Toolkit, and MaaS Guidance. These will be delivered once key supporting project workstreams have been completed.

**Table 6.1: Technology scope by Stage Gate**

STAGE GATE	1	2	3
Project 1: Integrated MaaS	Co-design requirements (services and tools); build, beta test and Indigenous Smart Mobility Pilot.	Increase users; Increase functionality; Quarterly releases based on ongoing co-design and feedback; New mobility tools designed and delivered.	Consolidate learnings; Upgrade platform and service in line with emerging SMP co-design target group requirements.  New features and markets
Project 2: Smart Trip Planning	Trip-planning microservice.	Integration with new third-party data to deliver new functionalities	
Project 2: Single Payment Platform	Integrated pricing information; payment microservice.	Payment microservice; MaaS stored account API; Payment for specific modes via one stored balance account.	Multiple-payment API; payments to multiple operators via a range of interface options.
Project 3: SSIIC	Integration with Stage Gate 1 data sources; API gateway; prototype open-data website with visualization tools	Integration with Stage Gate 2 data sources; open data website with visualization and analytics tools	Integration with Stage Gate 3 data sources; open-data website with visualization analytics, and simulation tools





Table 6.2: Critical path dependencies

Critical path activities for Projects 1, 2 and 3	Critical path dependencies between projects
<ul style="list-style-type: none"> <li>• Stakeholder analysis and engagement</li> <li>• Scope definition</li> <li>• Project plan</li> <li>• Budget creation</li> <li>• Co-design sessions</li> <li>• Requirements gathering <ul style="list-style-type: none"> <li>- Technology requirements</li> <li>- Functional requirements</li> <li>- Non-functional requirements</li> </ul> </li> <li>• Functionality levels per sprint</li> <li>• Disaster and recovery plan</li> </ul>	<ul style="list-style-type: none"> <li>• Technology, functional, and non-functional requirements needed to be considered between all projects</li> <li>• Data elements/strategies required for personal data (between Projects 1 and 2)</li> <li>• Data elements/strategies required for transit, traffic and public data (between Projects 2 and 3)</li> <li>• Functionality levels for all projects per sprint and per pilot</li> <li>• Stage Gate deliverables that align functionality (between Projects 2 and 3)</li> </ul>

services. Once these have been established, the buildout and delivery of the key components runs in parallel between the major projects, as shown in Figure 6.2.

With the scope defined for each project, the following critical path dependencies need to be considered by our PMO and product owners, as shown in Table 6.2.

Identifying and mitigating the impacts of schedule deviations are key determinants in a project's success or failure. Our development approach helps to drive innovation (since solutions are not prescribed) and provides transparency on progress for early decision-making based on tracked KPIs in our sprint reviews sessions. Adequate contingency planning from both delivery and budgetary perspectives at the outset is critical to minimizing the impacts of project plan slippage.

With this schedule and strategy, we will complete a regular stream of major public-facing deliverables (Stage Gate releases) that will be relevant to the public and to stakeholders and demonstrate progress on SCC outcomes (as captured by the MWI, detailed in Chapter 7).

## 6.3 RESOURCING

### 6.3.1 STAFFING

We have identified multiple groups and specific resources to comprise our core team (Table 6.3 and Figure 6.3). To deliver these skills, SIPP can draw on a wide range of organizations (regionally and globally) to complement its existing team structures.

Beyond the core team structure, SIPP will rely on its P3 governance model (Chapter 3). The P3 model is a critically important element of project management, as the project Steering Committee will be made up of members from diverse mobility stakeholders. Our governance is perhaps the most important factor in a successful delivery, as the most common reason for large system failures comes from lack of full buy-in and support from top-level stakeholders. SIPP's model is designed specifically for this purpose.

### 6.3.2 INFRASTRUCTURE READINESS

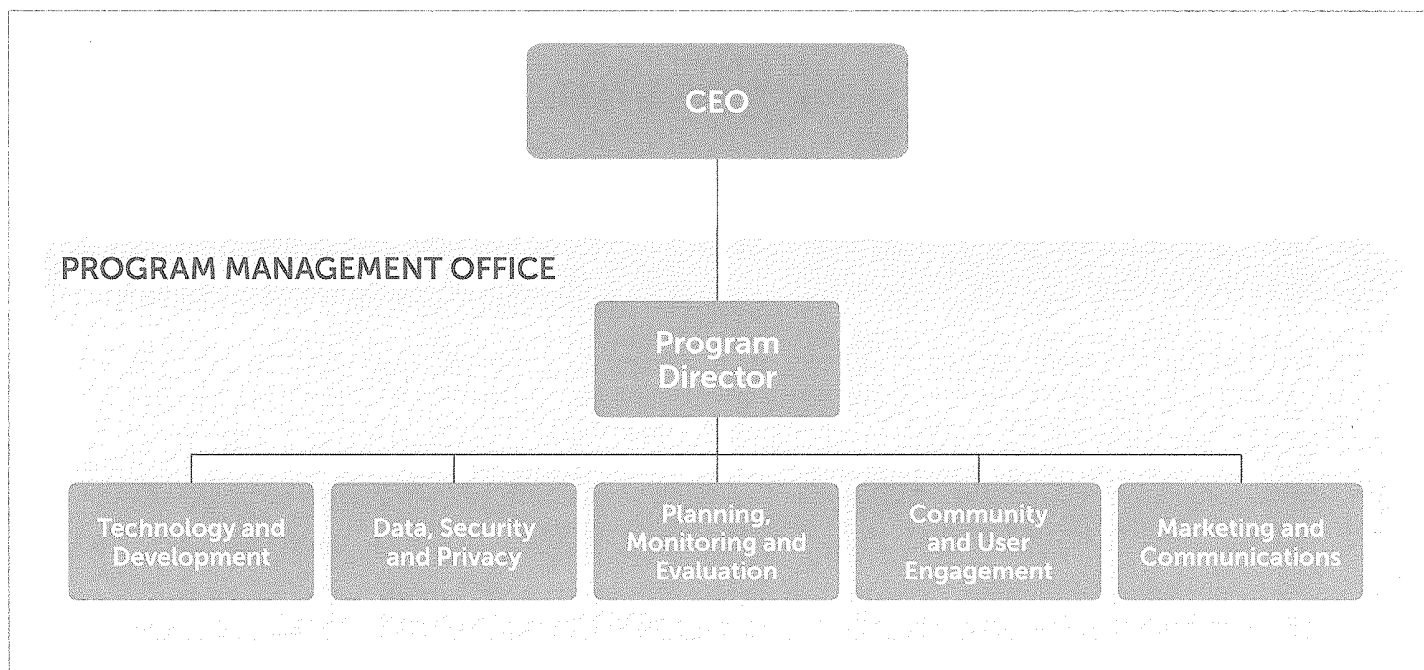
To support the quick start and delivery of the Indigenous Smart Mobility Pilot, we have begun identifying an inventory of assets (such as community vehicles), as well as travel information (including origin-destination, trip frequency) about the potential riders. This work has been started with our First Nations communities, groups, and education centres such as Songhees Nation, Sc'ianew Nation, Saanich Adult Education Centre, and WSÁNEĆ School Board, who have vehicle assets that are available for use within the Indigenous Smart Mobility Pilot. This demonstrates a major element of the projects' infrastructure readiness and contributes to the 'quick wins' element of our approach to project delivery.

Community engagement and collaboration was the key to bringing together and coordinating the sharing of assets amongst multiple First Nations communities and education facilities. This inclusive approach



**Table 6.3: Core team roles and responsibilities**

ROLE	RESPONSIBILITIES
Program Director	<ul style="list-style-type: none"> <li>• Reports to the CEO, ensuring that projects remain on track from a scheduling, resourcing, dependency, budgetary and functionality perspective</li> </ul>
Technology and Development	<ul style="list-style-type: none"> <li>• Manages the digital architecture including the technical requirements to deliver three projects</li> <li>• Coordinates the research and development roadmap and liaises with product owners</li> </ul>
Data, Security and Privacy	<ul style="list-style-type: none"> <li>• Engages with third-parties for data sharing and data access agreements</li> <li>• Responsible for compliance with the PIPA and handles all inquires relating to data privacy</li> </ul>
Planning, Monitoring and Evaluation	<ul style="list-style-type: none"> <li>• Measures performance and monitors our progress towards outcomes</li> <li>• Responsible for project controls and reporting</li> </ul>
Community and User Engagement	<ul style="list-style-type: none"> <li>• Coordinates and facilitates co-design sessions and user engagement to guide development of project</li> <li>• Provides customer support</li> <li>• Coordinates internal task forces and key stakeholder groups</li> </ul>
Marketing and Communications	<ul style="list-style-type: none"> <li>• Provides inbound marketing to project teams</li> <li>• Provides outbound marketing for the projects</li> </ul>



**Figure 6.3: SMP project management**

has never happened before for these groups and demonstrates that SIPP's P3 model can bridge the gap between the communities and their mobility needs.

Through our partnership with BC Transit, we have been able to secure driver training services. This is vital to the operation and success of the Indigenous Smart Mobility Pilot and provides employment opportunities and benefits to the communities involved, further demonstrating the positive impacts achievable through this pilot project (refer to Chapter 8 – Implementation for Community Employment Benefits).

As noted in the Chapter 2, the Indigenous Smart Mobility pilot will keep costs low by utilizing existing assets – both from a vehicle and people perspective. This approach ticks several boxes:

- Low cost;
- Low barrier to access and use the service;
- Employment opportunities; and
- Better transit services to those that need it most and is easily replicable and scalable.

Our research associated with the Indigenous MaaS pilot led us to the Preston model, which promotes community wealth building. This model mirrors our approach to the Indigenous MaaS pilot as it seeks to build a collaborative, inclusive, sustainable framework to support the local economies. This pilot can draw from lessons learned through the establishment of the Preston model by seeking to improve employment (through driver and operator employment opportunities), housing affordability (by improving transit options and reducing the need to live closer to high-cost areas). It also reduces reliance on public funding by reinvesting back into the communities.

With our partnerships, the projects will have access to key resources, including transportation planners and analysts at BC Transit, to assist with service and route planning, pickup/drop-off zones and schedule integration.

### 6.3.3 FINANCIAL

The financial management of the three projects is a key consideration not only for the grant funding but also to manage aligned funding contributions from our partners. Further to this, budget and financial management practices will be integrated into the PMO responsibilities to ensure strong attention to financial performance to plan throughout the project. Please refer to the Appendix 1 for further information.

### 6.4 STAKEHOLDERS

As we develop the concepts and teams for each project, we will conduct a stakeholder analysis to understand exactly what each key stakeholder's interests, expertise and investments are across the projects. This analysis will help to measure the success of each stage of the project to ensure that the work being conducted is meeting the needs of those stakeholders as well as the objectives of the projects and overall SMP. This can be achieved regularly through the quarterly sprint reviews and product demonstrations.

An early stakeholder analysis will help to inform where opportunities and gaps lie in our partnerships, further enhancing our goal to be nimble with our procurement policies. Please refer to Chapter 4 for more information.

### 6.5 PROCUREMENT PLAN

These projects naturally require the coordination of resources and oversight from many private and public organizations. Bringing these worlds together requires a P3 structure to be built and managed. SIPP has already developed and proven (and gained international recognition for) this model. Procurement will be open and transparent, using public procurement processes with a clear line of sight toward the main outcome statements of the projects. SIPP will not be beholden to one technology or technology provider. Rather, it will favour open technologies in all procurement activities, allowing for maximum flexibility and transferability in our solutions.

### 6.5.1 PARTNER AND VENDOR SELECTION

We plan to tap into the leading expertise, design and products that have already been developed and tested. This will allow us to develop quick wins and complement our Stage Gate delivery and agile approach for the three projects. Our structure as a private NFP supports this approach as it allows for innovative procurement approaches while maintaining openness and transparency.

To achieve this, we will use an adaptation of the industry standard IT Infrastructure Library (ITIL) framework in vendor solicitation. The framework, in brief, consists of having a clear view of outcomes, objectives and requirements; creating a requirement evaluation matrix; a market scan, and an evaluation of vendor offer against the requirements.

### 6.5.2 VENDOR ENGAGEMENT

Once a vendor is selected, we propose using an iterative engagement model. Traditional models assign large contracts and scope under a single static engagement where vendor performance measurement is difficult, and the contract is seen through to its conclusion, with no significant adaptations to changing conditions.

The iterative approach divides projects into distinct parts, with evaluation and feedback processes along the way, including progression of scope and budget approvals. By using this approach can also include an evolving scope framework, with detailed scope for early phases of the project and more indicative scope for later phases with leaner requirements. Iteration allows for better risk management and course correction based on real-time vendor delivery performance and aligns well with the Stage Gate process.

## 6.6 COMMUNICATIONS

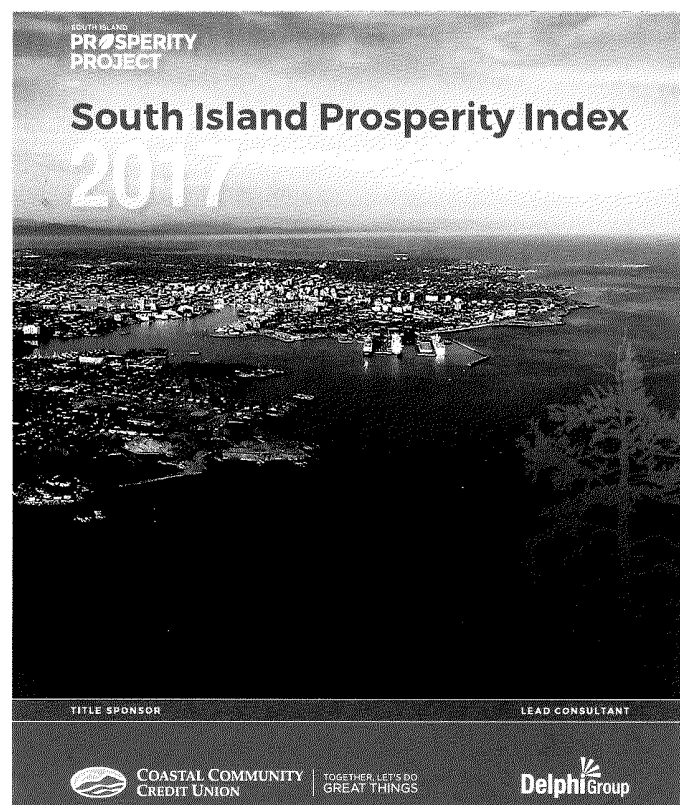
Regular feedback between projects is a key component of the development process. It is not an adjunct function to be completed at the end of the cycle. By using techniques such as early beta trials and paper workflow prototypes and following customers in their daily journeys (surveys and feedback captured through the MWI), we will develop a

growing understanding of our customers' mobility needs throughout the development process. While the main project advocate for the customer will be the Product Manager, it is expected that all project members will have an intimate knowledge of their customers.

Beyond the specifics of project communications, there will be a consistent strategic communications plan delivered to communities. This, coupled with the outputs of the SSIIC, will give the broader community a good sense of 'what is going on' with the program throughout development. Engagement activities already completed in advance of this finalist submission—including social media, innovation events, showcase events—will continue as well.

### 6.6.1 REPORTING STRATEGIES

Regular monthly reporting from the PMO to the Steering Committee will ensure traceability from both a deliverable and budgetary point of view. This level of reporting accountability helps to identify and mitigate unknown risks and keeps the key stakeholders engaged through the design and development stages.



Each year SIPP releases the South Island Prosperity Index, which measures the region's competitive position among the five themes.



We will have quarterly reporting with our sprint reviews to describe activities carried out, lessons learned with end-user feedback and planned activities for the next quarter across all three projects to maintain the required alignment. Additionally, the MWI is designed to be a dynamic, public-facing tool that engages users in what's possible with a bolder, smart mobility future.

### 6.7 SUSTAINING PROJECTS BEYOND THE CHALLENGE

Beyond the lifecycle of the SCC, we will work to sustain projects over the long term. Our vision for the evolution of MaaS is to progressively expand to more user groups and wider geographies across Greater Victoria, as well as and supporting expansion across Canada with our learnings and products. Our intent for Projects 1 and 2 is to develop the service and business models that can create revenues streams directly related to the value added by the SMP (Appendix 1).

As discussed in Chapter 5, our approach to data and privacy means that we will establish a data trust to govern and sustain the SSIIC digital platform (Project 3). We see the SSIIC digital platform as the foundation for a civic data marketplace (beyond transportation data) that provides value for both government and private organizations. Our intent through the development of the SSIIC is to build institutional capacity and explore revenue models with the data trust to enable sustainable operation and, over time, become a physical, interactive mobility lab.

## 6.8 RISK MITIGATION

### 6.8.1 APPROACH TO RISK MANAGEMENT

There must be a systematic approach to risk management and mitigation assuming at least the following steps:

- Identify known risks and predict potential risks
- Assess and analyze the probability and impact
- Plan to action to mitigate and minimize the risk(s)
- Implement the plan to ensure the risk has minimal impact on the project
- Monitor, measure and control the risk

### 6.8.2 RISK MONITORING

Establishing a risk register will help to collect and organize the risks into categories to help with the management and mitigation processes. Categories will be defined in conjunction with the PMO, stakeholders and project teams but an early framework would include

- Customer and stakeholder alignment
- Project management (scope/time/cost/quality changes)
- Resources and team (skills, availability)
- Technology and system architectures
- Change management
- Financial (procurement, expenses, contribution management)
- User adoption and feedback
- Data privacy and security





Our strategy for managing these risks will align to our outcomes and KPI's to measure the impacts those risks may have, as well as targeted decision making to resolve them. Any new risks will be raised, reviewed and ranked as part of the quarterly sprint reviews and will roll up into the monthly reporting by the product owners to the PMO and Steering Committee. Any existing risks that have been previously identified and are on the risk register will require review and ranking as well as mitigation measures and plans to address.

Table 6.4 provides a high-level overview of project management related risk, while project or issue specific risks are identified in each chapter of this submission.

**Table 6.4: Risk mitigation strategies**

RISK	MITIGATION STRATEGIES
Lack of executive support or change strategy	Refer to Chapter 3
Lack of stakeholder or public engagement	Refer to Chapter 4
Technology risk	Refer to Chapter 2
Filling the required core project resources	Greater Victoria has a rich talent set for partnership project management and technical development. SIPP will draw on its member organizations for additional support if required.
Unforeseen technical/logistical risks identified late in the project	SIPP has a broad network of partners and subject matter experts to draw upon. If/as new issues arise, this network can be brought into the projects on an as-needed basis. Open architecture also increases the responsiveness to these risks by ensuring flexibility.
Lack of integration and coordination across projects	Our PMO structure and outcomes-based approach is specifically designed to mitigate this risk
Projects do not follow described schedules	Through Agile methodology, coupled with formalized Stage Gates connected to key outcomes, the projects will have strong, early notification of any possible slippages. Remediation actions will be developed and tracked by the PMO.
Requirements are insufficiently designed	Requirements definition is a critical element to any project's success. They must be clear, complete, unambiguous and well aligned to the strategy. The key to strong requirements is a robust design and governance model, and formalized requirements change management and approval process. While the process can be agile, it must be structured and clear. We will deploy formalized board of change and change management practices within our PMO
Delays in schedule as a result of procurement model	SIPP has begun the vendor engagement process and expects to finalize a detailed procurement policy and strategy ahead of the grant award so that we can rapidly transition into execution upon award.
Lack of continuity of program and pilots after grant funding ends.	We are designing our SMP to sustain it over the long term, including how the projects transition to sustainable service and business models and how the SSIIIC develops into a physical space. SIPP's funders have expressed strongly that smart mobility is a key, long-term, region-wide priority.
The projects drift from the real customer needs	Customers will be integrated in the project through the rapid sprint cycles in the agile process starting with the co-design target groups. Feedback will ensure the customer is continually validating the project outputs.

## CHAPTER 6 LINKAGES TO OUTCOME THEMES

 <p><b>Convenience</b> Travel information (origin-destination, trip frequency) about the potential riders improves convenient travel options</p>	 <p><b>Affordability</b> The Preston model addresses housing affordability and reduces reliance on public funding  Using existing assets keeps costs down and obviates major initial investment required to kick-start the Pilot</p>	 <p><b>Wellbeing</b> We will develop an MWI Toolkit, Co-design Toolkit, and MaaS guidelines to help measure wellbeing</p>	 <p><b>Inclusivity</b> Community engagement and collaboration was the key to bringing together and coordinating the sharing of assets amongst First Nations communities and education facilities to ensure inclusivity  Steering Committee will include diverse mobility stakeholders  SAFE and Stage Gate approach ensures continual community/end user engagement</p>
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# CHAPTER 7

## Performance Measurement

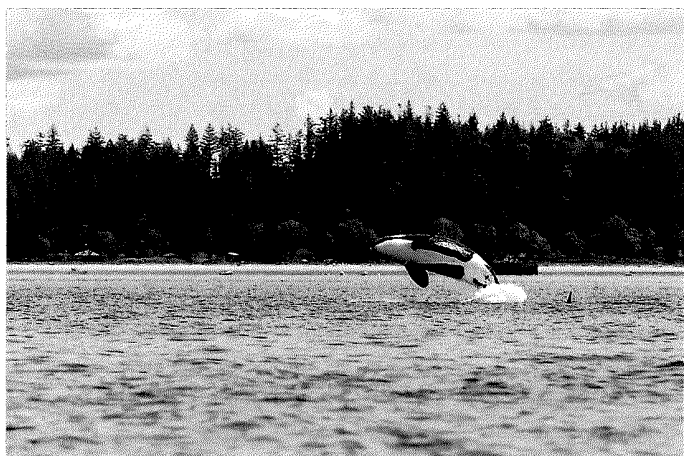
*"Not everything that can be counted counts, and not everything that counts can be counted."*

– Albert Einstein

### 7.1 OUTCOMES-BASED PERFORMANCE MEASUREMENT FRAMEWORK

A well-defined performance measurement framework is vital to monitoring project operations and outcomes. It embeds a validated learning approach into our overarching SMP and projects. SIPP uses a results-based management approach, creating alignment from vision to our intended results, while expressing the explicit linkages among planning, evaluation and reporting processes. This chapter details our Mobility Wellness Index, described in the following section. We then discuss the specific outcome statements, indicators and a monitoring plan for each of these areas.

Our performance measurement framework maintains laser focus on the overarching challenge and outcomes statements, supported by project-level inputs, activities and outputs. The framework provides insights to key stakeholders on progress toward desired outcomes at select intervals, which offers critical data to support validated learning and decision making (such as incremental investments in successive product development cycles). It complements this with an engaging and visually compelling public-facing reporting dashboard: the Mobility Wellness Index.



To have a positive environmental impact, we will ensure that our multimodal transportation network is green.



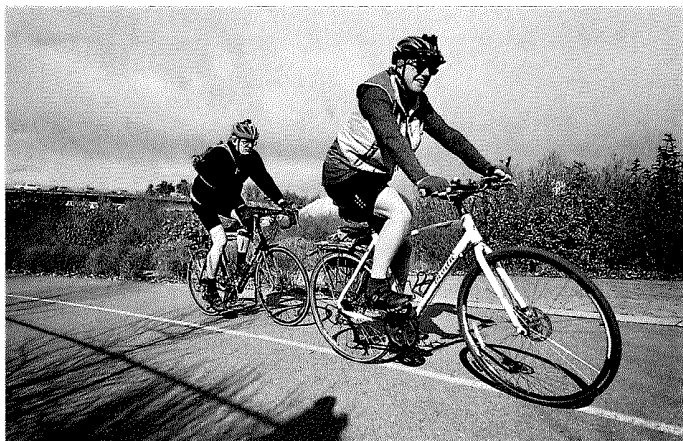
Inclusivity is essential to ensuring that even the most vulnerable populations have reliable and convenient mobility options.

As outlined in Chapter 1, our challenge statement is “We will collaboratively create a multimodal transportation network that is convenient, green and affordable, boosting South Islanders’ Mobility Wellness score by at least 20%.”

We will measure our progress against this statement to achieve five key outcome themes, which we have identified through engagement with stakeholders and the public: convenience, affordability, wellbeing, green and inclusivity. Since our initial proposal, we have added ‘inclusivity’ as our fifth outcome statement. We have added this based on our community engagement, which revealed how transportation can be a challenge for low-income and other vulnerable residents. This additional outcome statement allows us to monitor the impacts of projects for these co-design target groups.

We outline our three-year outcomes-based performance measurement framework for the SMP in the following subsections. Full details will be published on our website ([www.southislandprosperity.ca](http://www.southislandprosperity.ca)) on March 11, 2019. The report on the MWI will be available on our website March 16, 2019, and the more holistic South Island Prosperity Index (2018/19 edition) will be published on our website on April 30, 2019.





Cyclists ride on the Galloping Goose Trail.

### 7.1.1 MOBILITY WELLNESS INDEX

The Mobility Wellness Index (MWI) is the first performance measurement system designed to meaningfully measure the effects that mobility systems have on the physical, emotional and financial wellbeing of their users. The MWI is a composite score based on regional performance across 20 indicators. It is informed by 40 metrics derived from six theme areas – five of those themes are our outcome statement themes noted above, and an additional theme is Policy and Governance. Progress will be measured relative to the composite score, which will increase as a result of investments and improvements to mobility systems (in Greater Victoria's case: the Smart Mobility Program).

The MWI was developed over many months and iterations through SIPP's work with Arup, Happy City, a taskforce of city leaders, transit planners, psychologists and social health experts, and supported through stakeholder interviews and extensive international literature and program review. While Greater Victoria offers an ideal testing ground to pioneer this advance in transportation performance measurement, we already have MWI partnerships with the City of Montreal, Smart Columbus, CUTA, and others to ensure the design of the MWI can be scaled and replicated to other cities across Canada and the world.

The MWI composite combines different themes, indicators and metrics—including both quantitative and qualitative data—that indicate progress resulting from investments and improvements to mobility systems. The MWI is shown graphically as a polar diagram, as seen in Figure 7.1. This diagram offers three critical layers of information for monitoring our progress:

**Themes** are represented in the inner layer closest to the centre of the circle. There are six themes: one for each outcome statement, plus a sixth, labelled Policy and Governance (relating specifically to how governments are developing and implementing policies and programs that help improve wellbeing).

**Indicators** are associated with each theme on the outer layer of the diagram. There are 20 indicators, each forming a slice within the polar diagram. These are linked to specific goals and sub-themes listed under each outcome statement. For example, the Greener theme has resource efficiency, cleaner air, and citizen engagement indicators.

**Metrics** are the data that produces the score for each indicator (located as the middle layers of the circle). The score for each indicator is represented by a coloured location within each indicator slice. Indicators that are performing poorly will have a coloured location closer to the centre of the circle, whereas indicators that are performing well will have coloured location closer to the outer layer of the circle. These are measured either in quantitative or qualitative form and scored as averages to inform indicators.



Seniors need convenient, accessible and affordable transportation, both to meet daily needs and to mitigate the risk of isolation and loneliness.

© CUTA

The MWI (shown in Figure 7.1) will enable residents and decision-makers to quickly understand how the region is performing on specific indicators related to the challenge and outcome statements. The MWI will be directly tied to the data collected and analyzed

at the SSIIC. Additional MWI tools, including assessment scorecards, will supplement the index to summarize how current the information is and to provide details on the scoring of each metric.

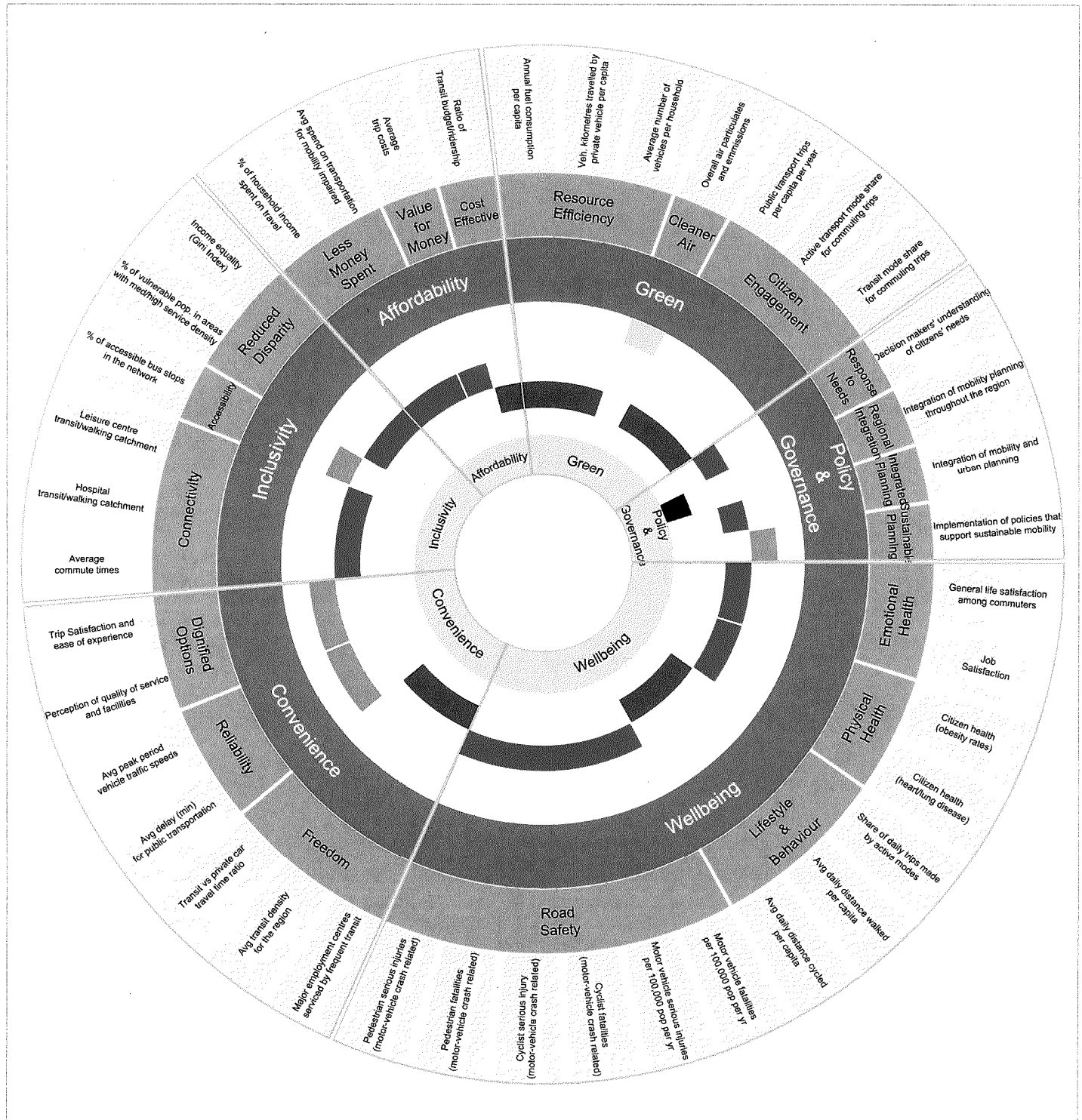


Figure 7.1: Mobility Wellness Index



## 7.1.2 LINKING ACTIVITIES, INPUTS AND OUTPUTS

Table 7.1 outlines key activities for all projects aligning with Figure 6.2. For each project, we have defined the activities, inputs and outputs that are delivered as part of the four Stage Gates. The key resources and partnerships necessary for success are

listed for each activity as inputs. The table links the activities, inputs, and outputs. Each of these activities are intended to progress us towards our five outcome statements and to a sustainable solution beyond the smart cities grant. In Section 7.1.3, we discuss our monitoring and evaluation plan to measure our progress toward outcomes.

Table 7.1: Project activities, inputs and outputs

Stage Gate	Activities	Inputs	Outputs
Project 1 - Integrated Mobility as a Service (MaaS)			
1	Select partner and scoping	<ul style="list-style-type: none"> <li>Resources: Community and User Engagement, Technology and Development, Data, Security and Privacy</li> </ul>	<ul style="list-style-type: none"> <li>Detailed co-design strategy and technology development roadmap</li> <li>Selected MaaS partner</li> </ul>
1	Co-design and level 1 MaaS	<ul style="list-style-type: none"> <li>Resources: Community and User Engagement, Technology and Development</li> <li>Key partners: MaaS partner, co-design and delivery partners</li> <li>Indigenous Smart Mobility Pilot: vehicles, drivers</li> </ul>	<ul style="list-style-type: none"> <li>Initial MaaS website/application tailored to three co-design target group requirements and integrated with MaaS microservices.</li> <li>Prototype MaaS service in operation with trial co-design group</li> <li>Identified potential revenue sources</li> <li>Feedback from users and partners involved in trial</li> </ul>
2	Co-design and level 2 MaaS	<ul style="list-style-type: none"> <li>Resources: Community and User Engagement, Technology and Development</li> <li>Key partners: MaaS partner, co-design and delivery partners</li> <li>Indigenous Smart Mobility Pilot: vehicles, drivers</li> </ul>	<ul style="list-style-type: none"> <li>New users and feedback from co-design target groups across Greater Victoria</li> <li>Revised prototype, tested potential revenue sources, and new functionality based on user feedback</li> </ul>
3	Co-design and level 3 MaaS	<ul style="list-style-type: none"> <li>Resources: Community and User Engagement, Technology and Development</li> <li>Key partners: MaaS partner, co-design and delivery partners</li> <li>Indigenous Smart Mobility Pilot: vehicles, drivers</li> </ul>	<ul style="list-style-type: none"> <li>New users and feedback from adjacent and new markets across Greater Victoria</li> <li>Solution developed with established revenue source and new functionality added based on user feedback</li> <li>Full MaaS solution scaled for use by adjacent and new markets in service</li> </ul>
4	Sustainable solution – ongoing improvements and scaling	<ul style="list-style-type: none"> <li>Resource: Technology and Development</li> <li>Key partners: MaaS partner, scaling partners (e.g. BC Transit, CUTA)</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable MaaS solution with revenue stream in service. With partners, learnings help to scale solutions across Canada and internationally</li> </ul>
Project 2 - Smart Trip Planning and Single Payment Platform			
1	Select partner and scoping	<ul style="list-style-type: none"> <li>Resource: Technology and Development</li> </ul>	<ul style="list-style-type: none"> <li>Detailed technology development roadmap</li> <li>Selected MaaS partner (same as Project 1)</li> </ul>
1	Level 1 microservices	<ul style="list-style-type: none"> <li>Resource: Technology and Development</li> <li>Key partner: MaaS partner</li> </ul>	<ul style="list-style-type: none"> <li>Platform connected to transport operator APIs (via SSIIIC) that enables basic trip planning</li> <li>Identified revenue sources for platform</li> </ul>
2	Level 2 microservices	<ul style="list-style-type: none"> <li>Resource: Technology and Development</li> <li>Key partner: MaaS partner</li> </ul>	<ul style="list-style-type: none"> <li>Platform enables trip planning and booking (using transport operator systems)</li> <li>Additional functionality as identified by three co-design groups</li> <li>Tested revenue sources for platform</li> </ul>
3	Level 3 microservices	<ul style="list-style-type: none"> <li>Resource: Technology and Development</li> <li>Key partner: MaaS partner</li> </ul>	<ul style="list-style-type: none"> <li>Platform enables full trip planning, booking and payment using a single account</li> <li>Additional functionality as identified by adjacent and new markets</li> <li>Established revenue sources for platform</li> </ul>
4	Sustainable solution – ongoing improvements and scaling	<ul style="list-style-type: none"> <li>Resource: Technology and Development</li> <li>Key partners: MaaS partner, CUTA</li> </ul>	<ul style="list-style-type: none"> <li>Platform with revenue stream scaled for use across Greater Victoria, with lessons learned for Canada</li> </ul>



Table 7.1: Project activities, inputs and outputs (continued)

Stage Gate	Activities	Inputs	Outputs
Project 3 - Smart South Island Inspiration Centre (SSIIC)			
1	Engage Operators and develop data agreements	<ul style="list-style-type: none"> <li>Resource: Data, Security and Privacy</li> <li>Key partners: transport operators, local municipalities</li> </ul>	<ul style="list-style-type: none"> <li>Data sharing agreements and data licensing agreements with transport operators and open-data providers (e.g. local municipalities)</li> </ul>
1	Select Partner + scoping	<ul style="list-style-type: none"> <li>Resources: Technology and Development, Data, Security and Privacy</li> </ul>	<ul style="list-style-type: none"> <li>Specification with SSIIC digital architecture with technical, data, privacy and security requirements</li> <li>Selected technology development partner</li> </ul>
1	Co-design and Level 1 SSIIC	<ul style="list-style-type: none"> <li>Resources: Data, Security and Privacy, Technology and Development, Community and User Engagement</li> <li>Key partners: technology partner, focus groups with data consumers</li> <li>Data: Stage Gate 1 data requirements</li> </ul>	<ul style="list-style-type: none"> <li>SSIIC digital platform – regional open data platform connected to transport operator APIs and open-data providers, and website/open data portal with visualization of spatial data layers on a map</li> <li>Identify potential revenue sources</li> </ul>
2	Engage Operators and develop data agreements	<ul style="list-style-type: none"> <li>Resource: Data, Security and Privacy</li> <li>Key Partners: Stage Gate 2 data providers</li> </ul>	<ul style="list-style-type: none"> <li>Data sharing agreements and data licensing agreements for Stage Gate 2 data.</li> </ul>
2	Co-design and Level 2 SSIIC	<ul style="list-style-type: none"> <li>Resources: Data, Security and Privacy, Technology and Development, Community and User Engagement</li> <li>Key partners: technology partner, focus groups with data consumers</li> <li>Data: Stage Gate 2 Data requirements</li> </ul>	<ul style="list-style-type: none"> <li>SSIIC Level 2 digital platform – Website/open data portal with visualization and mapping, plus analytics tools that reveal insights related to five outcomes</li> <li>Tested potential revenue sources</li> </ul>
3	Engage Operators and develop data agreements	<ul style="list-style-type: none"> <li>Resource: Data, Security and Privacy</li> <li>Key partners: Stage Gate 3 data providers</li> </ul>	<ul style="list-style-type: none"> <li>Data sharing agreements and data licensing agreements for Stage Gate 3 data</li> </ul>
3	Co-design and Level 3 SSIIC	<ul style="list-style-type: none"> <li>Resources: Data, Security and Privacy, Technology and Development, Community and User Engagement</li> <li>Key partners: technology partner, focus groups with data consumers</li> <li>Data: Stage Gate 3 Data Requirements</li> </ul>	<ul style="list-style-type: none"> <li>SSIIC Level 3 digital platform - Website/open data portal with visualization, mapping, and analytics tools, plus functionality to simulate/model impacts on outcomes</li> <li>Established revenue sources for platform</li> </ul>
4	Sustainable solution - ongoing improvements and scaling	<ul style="list-style-type: none"> <li>Resource: Data, Security and Privacy, Technology and Development</li> <li>Key partners: technology partner, data providers</li> <li>Data: New data sources as required</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing operation of SSIIC with sustainable revenue source; scaled to broader data sets beyond transportation</li> <li>Lessons learned and best practices on the infrastructure, data governance, data privacy, and processes on the SSIIC model for data-driven civic engagement</li> </ul>
Toolkits and scaling			
2	MWI Toolkit	<ul style="list-style-type: none"> <li>Resources: Planning, Monitoring and Evaluation, Data, Security and Privacy, Marketing and Communications</li> <li>Key partners: partner municipalities (e.g. Montreal)</li> </ul>	<ul style="list-style-type: none"> <li>Toolkit containing the indicators and methodology to calculate a Mobility Wellness Index in other cities and regions in Canada</li> </ul>
2	Co-Design Toolkit	<ul style="list-style-type: none"> <li>Resources: Community and User Engagement, Marketing and Communications</li> <li>Key partners: co-design facilitators</li> </ul>	<ul style="list-style-type: none"> <li>Co-Design Toolkit with templates, materials, instructions to undertake a co-design process in a community</li> </ul>
3	MaaS Guidance	<ul style="list-style-type: none"> <li>Resource: Technology and Development, Marketing and Communications</li> <li>Key partner: MaaS partner</li> </ul>	<ul style="list-style-type: none"> <li>Lessons learned, best practices, and guidelines on the infrastructure and process required to implement MaaS in a community</li> </ul>
4	CUTA Scaling	<ul style="list-style-type: none"> <li>Resource: Marketing and Communications</li> <li>Key partner: CUTA</li> </ul>	<ul style="list-style-type: none"> <li>Published and shared by CUTA to municipalities and transit agencies across Canada</li> </ul>

7.1.3 MONITORING AND EVALUATION PLAN

Grounded in the MWI, our monitoring and evaluation plan is designed around key performance indicators (KPIs) linked to our five outcome statements. Qualitative sources include self-reporting of trip satisfaction, perception of alternative modes, and subjective wellbeing assessment. Quantitative sources include average commute times, average trip costs, and the population within a travel time catchment of key destinations. As outlined in Chapters 2 and 5, these data sources will be integrated with others through Project 3 (SSIIC), which will provide visualizations and analytics on how both personal and community decisions on transport and mobility advance our outcome statements.

The following tables (Tables 7.2–7.6) outline our preliminary, intermediate and long-term outcomes for each outcome statement. For brevity, we have summarized our detailed logic model in the summary tables below for each outcome statement. The tables also reference the primary and alternate KPIs (associated with the MWI) that we will use to measure our progress towards achieving the challenge statement. The stated outcomes align with the timelines and deliverables within our Stage Gate approach, which is detailed in Chapter 6.

Table 7.2: Convenience outcome and KPIs

<b>Outcome statement 1 (Convenience):</b> With more convenient, accessible multimodal transportation options enabled by smart technology, the share of residents with access to convenient alternatives to single-occupancy vehicles will increase at least 20% by 2024.  <b>Sub-themes:</b> Connected, seamless, well-functioning, multiple options, integrated, faster, efficient, inclusive, accessible <b>KPIs:</b> Perception of quality of service and facilities (transit, shared and active modes) (primary); average commute times, proportion of population within 400m of a fixed route transit stop <b>Data Sources (sample):</b> CRD OD Survey; BC Transit Customer Satisfaction Survey; Subjective Wellbeing Assessment Toolkit; BC Transit routes/stops; Statistics Canada (census population)		
Outcomes	Target	Monitoring period
Preliminary outcomes	Half of the participants in our co-design target groups with improved access to convenient alternatives to single-occupancy vehicles	Stage Gate 1
Intermediate outcomes	Two-thirds of participants in our co-design target groups with improved access to convenient alternatives to single-occupancy vehicles	Stage Gate 2
Long-term outcomes	Users of MaaS and the Trip Planning and Payment Application with access to convenient alternatives to single occupancy vehicles will increase by at least 20% (compared to baseline)	Stage Gate 3



Table 7.3: Affordability outcome and KPIs

<b>Outcome Statement 2 (Affordability):</b> With improved multimodal transportation options and trip planning enabled by smart technology, area residents will spend, on average, less than 10% of their household incomes on transportation costs.		
<b>Sub-themes:</b> Cost-effective, value for money, resource-efficient, less money spent on travel. <b>KPIs:</b> Average trip costs (primary); percentage of household income spent on travel; average cost of vehicle ownership <b>Data Sources (sample):</b> Calculation based on regional fuel costs, transit fares, and distances travelled; Statistics Canada (Household spending – Table: 11-10-022-01); ICBC		
Outcomes	Target	Monitoring Period
Preliminary outcomes	Half of the participants in our co-design target groups will spend less on transportation compared to baseline (prior to participation)	Stage Gate 1
Intermediate outcomes	Two-thirds of the participants in our co-design target groups will spend less on transportation compared to baseline (prior to participation)	Stage Gate 2
Long-term outcomes	Users of MaaS and the Trip Planning and Payment Application will spend, on average, less than 10% of their annual household incomes on transportation	Stage Gate 3

Table 7.4: Wellbeing outcome and KPIs

<b>Outcome Statement 3 (Wellbeing):</b> With multimodal transportation options and planning enabled by smart technology, the number of daily trips made by active and healthy travel modes (i.e., walking, transit, cycling) will double by 2024 over the current baseline, and average levels of reported trip satisfaction in the region will rise 10%.		
<b>Sub-themes:</b> Safer, healthier, less stressful commute, enjoyable commute, comfortable, improved social connectivity. <b>KPIs:</b> Share of daily trips made by active modes (primary); trip satisfaction and ease of experience; citizen health; subjective wellbeing assessment <b>Data Sources (sample):</b> CRD OD Survey; active tracking (smartphone or wearable); BC Ministry of Health; Subjective Wellbeing Survey		
Outcomes	Target	Monitoring Period
Preliminary outcomes	Half of participants in our co-design target groups will report an increase in the number of active and healthy trips and an increase in trip satisfaction (from baseline)	Stage Gate 1
Intermediate outcomes	Two-thirds of participants in our co-design target groups will report an increase in the number of active and healthy trips and an increase in trip satisfaction (from baseline)	Stage Gate 2
Long-term outcomes	Users of MaaS and the Trip Planning and Payment Application will double their use of active and healthy travel modes over the current baseline, and average levels of reported trip satisfaction of these users will rise 10% (from baseline)	Stage Gate 3

Table 7.5: Green outcome and KPIs

<b>Outcome Statement 4 (Green):</b> Due to shifts in number of per-capita daily trips taken with personal automobiles towards daily trips per-capita taken with alternative travel modes, per-capita vehicle fuel consumption will decrease by 15% by 2024		
<b>Sub-themes:</b> Lower carbon footprint, efficient mobility, MWI <b>KPIs:</b> Annual fuel consumption per capita (primary); per-capita vehicle kilometres travelled by private vehicle; active transport/transit mode share <b>Data Sources (sample):</b> Statistics Canada (The Canadian Vehicle Survey); CRD OD Survey; Data BC (GHG emissions measurements)		
Outcomes	Target	Monitoring Period
Preliminary outcomes	One-third of participants in our co-design target groups will decrease their fuel consumption by 15%	Stage Gate 1
Intermediate outcomes	Half of participants in our co-design target groups will decrease their fuel consumption by 15%	Stage Gate 2
Long-term outcomes	Half of the users of MaaS and the Trip Planning and Payment Application report their vehicle fuel consumption has dropped by 15% (compared to baseline)	Stage Gate 3

Table 7.6: Inclusivity outcome and KPIs

**Outcome Statement 5 (Inclusivity):** As a result of improved and more integrated multimodal transportation options and trip planning enabled by smart technology, 20% more low-income residents and/or marginalized residents will report improved access to their places of education, services and/or employment by 2024.

**Sub-themes:** Equity, diversity, fairness, participation in society, economic mobility, physical accessibility

**KPIs:** Population within 15, 30 and 60 minutes of nearest employment centre, education, hospital, or leisure centre by transit/walking (primary); proportion of vulnerable population within areas with medium to high transit density

**Data Sources (sample):** SIPP calculation based on BC Transit routes/stops data, local municipality location data, and Statistics Canada population data

Outcomes	Target	Monitoring Period
Preliminary outcomes	Half of participants in our co-design target groups will report an increase in access to their places of education, services and/or employment	Stage Gate 1
Intermediate outcomes	Two-thirds of participants in our co-design target groups will report an increase in access to their places of education, services and/or employment (over baseline)	Stage Gate 2
Long-term outcomes	10% more low-income and/or marginalized residents will report improved access to their places of education, services and/or employment (from baseline)	Stage Gate 3

#### 7.1.4 OUTCOMES-BASED CONTRIBUTION AGREEMENT

We propose to align our outcome-based contribution agreement with our combined Agile and Stage Gate approach. As described in Chapter 6, this approach focuses on providing initial services quickly, monitoring progress, and iterating based on lessons learned. In this way, we have planned multiple releases and deliverables within each Stage Gate to progress toward our outcomes.

Table 7.7 gives a high-level summary of our outcome-based contribution agreement. During the implementation phase, we will expand on the Stage Gate elements to develop a more granular feedback, check-in and grant funding calendar. In particular, we propose an advance cash contribution towards Stage Gate 1 that is triggered once we have selected our technological development partners. Within the Appendix, we outline our Financial Plan in which we discuss how we will manage the funding to effectively deliver the project outputs and outcomes.

Table 7.7: Summary of proposed outcomes-based contribution agreement

Stage Gate	Amount
Advance Contribution toward Stage Gate 1	\$500,000
Stage Gate 1	\$3,000,000
Stage Gate 2	\$3,000,000
Stage Gate 3	\$3,000,000
Final Report	\$500,000
Total	\$10,000,000

## 7.2 RISK MITIGATION






Table 7.8: Risk mitigation strategies

RISK	MITIGATION STRATEGIES
Inability to access third-party data sourced from external databases	We have ensured that our performance indicators can be measured using databases that are routinely updated and surveys that are regularly conducted (including eventually embedded into various user interfaces). We have also ensured that the data points on which we are relying come from reliable sources and surveys, identifying overlap between data sources for cross-referencing. Furthermore, in noting the collection and publication schedules for different data points, we strategically coordinated our performance measurement timelines according to the availability of data.
Changes to data sources used for baseline measurements	
Infrequency or lack of updates to data sources required for monitoring performance	
Data privacy/ownership	The MWI and the SSIC will adhere to the high standards within the data management plan, described in Chapter 5.
Data are inconclusive on the progress towards outcomes	Through the SSIC, we will consolidate a wide range of datasets to help derive new insights for an Outcome Statement. Should a high-level metric be inconclusive, we will have access to detailed datasets to undertake further analysis to explore the issue alongside partners and informants.
Data are expensive to collect	We have identified primary and alternate KPIs and data sources and will select the KPI and monitoring frequency that balances the insight and value for money.
Qualitative data may be affected by survey quality and sampling bias	We will confirm the source of the qualitative data and, through the co-design target groups, make sure that the questions are relevant and clear to respondents.



Electric buses contribute to a cleaner transit fleet.

## CHAPTER 7 LINKAGES TO OUTCOME THEMES

 <p><b>Convenience</b> Many KPIs measure average commute times, proportion of population living near transit, and quality of transit service, facilities etc.</p>	 <p><b>Affordability</b> Many KPIs measure average trip costs, percentage of household income spent on transportation etc.</p>	 <p><b>Wellbeing</b> Many KPIs measure share of daily trips made by active modes, citizen health, subjective wellbeing assessment etc.</p>	 <p><b>Green</b> Many KPIs measure annual fuel consumption and vehicle kilometres travelled per capita, mode share using active transport/public transit etc.</p>	 <p><b>Inclusivity</b> Many KPIs measure accessibility to jobs, education, healthcare, or leisure centre by transit/walking, proportion of vulnerable population within areas with medium to high transit density etc.</p>
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# CHAPTER 8

## Implementation Phase Requirements

### 8.1 REPORTING AND LEGAL REQUIREMENTS

This chapter outlines how we will be compliant with the relevant local, provincial, and federal regulations and requirements during the implementation phase and outlines the associated risks and mitigation strategies. The implementation phase requirements include a Duty to Consult with Indigenous groups, Modern Treaty Obligations, Community Employment Benefit and Climate Lens Assessment.

#### 8.1.1 DUTY TO CONSULT WITH INDIGENOUS GROUPS

Across the region there are 10 First Nations communities: Tsartlip, Tsawout, Pauquachin, Tseycum, Malahat, Songhees, Esquimalt, T'Sou-ke, Sc'ianew (Beecher Bay), and Pacheedaht First Nations. Seven of these First Nations are active members of SIPP, ensuring we are well positioned to engage and consult with these communities.

The Duty to Consult with Indigenous groups is triggered when a planned action or initiative may result in an impact to a credible territorial claim, a Treaty or Constitutional right. Given that part of Project 1 (MaaS) is intended to serve Indigenous communities, this may trigger a Duty to Consult with Indigenous communities if an impact to a right or title is a possibility.

Beyond Duty to Consult, we know that engagement and building partnerships with Indigenous communities is paramount during all phases so that solutions meets community needs. During the finalist phase, we developed the project rationale and concept in collaboration with representatives from Songhees Nation and Sc'ianew Nation and WSÁNEĆ school board. As outlined in Chapter 4, we have learned about the needs of the students in these communities and understand how these communities can be partners in the delivery of the Indigenous Smart Mobility Pilot.

During the implementation phase, we commit to ongoing engagement and collaboration with Indigenous communities across the region. As detailed in Chapter 4, SIPP has a number of First Nation partnerships, and many initiatives have been developed specifically to be inclusive of First Nation communities. Further, as described in this proposal, Indigenous students will co-design our Indigenous Smart Mobility Pilot. Through this co-design process, we will better understand the transportation, mobility and accessibility challenges experienced by First Nations communities. We will continually seek their feedback and input during the technology development process. We will also continue to identify and cultivate partnerships with Indigenous communities related to the delivery of MaaS services.

SIPP leadership takes a collaborative approach and relies on First Nations partners to offer expertise on appropriate approaches and programs addressing First Nations needs. For the SMP, we commit to engaging and consulting with the First Nations communities in line with the guidance issued by the British Columbia Ministry of Indigenous Relations and Reconciliation: *Guide to Involving Proponents When Consulting First Nations*, which outlines the approach to consultation including preparation, engagement, accommodation, and decision and follow-up.

#### 8.1.2 MODERN TREATY OBLIGATIONS

Five of the 10 First Nations in the region are currently negotiating modern treaties with the Crown through the BC Treaty Process. The T'Sou-ke, Sc'ianew, Songhees and Malahat First Nations are negotiating under the Te'Mexw Treaty Association and signed an Agreement-in-Principle in 2015. Negotiating separately with the Crown, Pacheedaht signed a Framework Agreement in 1997 and are aiming to sign an Agreement-in-Principle in 2019.

At this time, there are no modern treaties implemented between the Crown and the First Nations in the region that will trigger an obligation for this application. However, as our partnering First Nations may reach final agreement in the next five years and become modern treaty Nations, SIPP recognizes the significance of this shift in self-governance.

SIPP is fully committed to supporting our partners as they establish self-governance, and we commit to fulfilling any associated obligations that are relevant to our projects.

### 8.1.3 COMMUNITY EMPLOYMENT BENEFITS

The Community Employment Benefits (CEB) is a reporting framework for projects that receive funding under the Investing in Canada Infrastructure Program. This reporting framework focuses on employment and/or procurement opportunities provided to at least three of the following groups: apprentices; Indigenous peoples; women; persons with disabilities; veterans; youth; recent immigrants; and small-sized, medium-sized and social enterprises.

SIPP has led considerable engagement with governments, stakeholders and community members to best understand regional transportation challenges. SIPP has identified three groups for employment opportunities, outlined below, based on their current needs and gaps related to transportation and mobility.

#### Indigenous peoples

We have selected Indigenous peoples not only because they are active members of SIPP, but also because First Nations communities face specific mobility barriers that prevent meaningful access to education and economic opportunities. In the near future many of our First Nations partners will be evolving into modern treaty Nations with self-governing rights. This historic change will create many new opportunities. Project 1 (MaaS) will produce Indigenous-owned employment opportunities through the development of the Indigenous Smart Mobility Pilot (for example, within this ownership structure, jobs such as administrators, coordinators, and drivers will be needed).

#### Persons with disabilities

Our projects will offer opportunities to hire persons with disabilities, including members of our region's rapidly growing senior population, perhaps as call centre representatives, to encourage peer-to-peer support.

#### Small-sized, medium-sized and social enterprises

As an economic development organization, our mandate is to advance sustainable and inclusive economic prosperity in the region. We have selected this group as critical to support and monitor, as our SMP can directly and indirectly generate growth in these enterprises. Technology development has direct influence in the selection and partnership of small-sized, medium-sized and social enterprises in the development of the SMP. This could be through a partnership with these enterprises derived from the Open Innovation Challenges. Furthermore, we could indirectly support higher employment through our SMP. As transport and mobility within Greater Victoria is made more convenient and affordable, the region will become a more attractive place for small, medium, and social enterprises to locate their businesses.

During implementation, we will track progress by monitoring and reporting on the number of people employed in these target groups. We will also document the value of contracts awarded to small-sized, medium-sized and social enterprises. We will then consolidate both values for submission in our annual report and financial statements, issued to Infrastructure Canada.



The SMP will create a range of employment opportunities in the region.



8.1.4 CLIMATE LENS ASSESSMENT

A Climate Lens Assessment is required by Infrastructure Canada for the SCC if, over the three-year program timespan:

- The total eligible project costs are \$10M or greater; and
- The project addresses climate change mitigation, adaptation or resilience or disaster mitigation.

While this project meets the first criteria, the core focus of the project is on improving transport and mobility and does not meet the second criteria. Therefore, a Climate Lens Assessment would not be required during our implementation phase.

8.1.5 PASSENGER TRANSPORTATION ACT

Compliance with the *Passenger Transportation Act* is critical for SIPP given its pertinence to the SMP. The *Passenger Transportation Act* in British Columbia requires individuals and companies operating commercial passenger vehicles to have a passenger transport license.

While SIPP is not in the business of operating transportation services, our SMP includes the development of technology to improve transportation convenience for residents. The inclusion of technology as a solution may enable the development of new transportation services or the entry of new transportation operators into the Greater Victoria market.

Therefore, we will ensure the transport operators that partner with SIPP are compliant with the provisions within the *Passenger Transportation Act*, as a condition of the partnership. We will require any personal transport operators exempt from the Act to provide evidence that they have the appropriate license and insurance to operate their vehicle. Furthermore, specific to Project 1 (MaaS), SIPP will cross-reference the *Community Care and Assisted Living Act* to ensure the project is in full alignment with special facilities where specialized mobility services are warranted.

8.2 RISK MITIGATION

Table 8.1: Risk mitigation strategies

RISK	MITIGATION STRATEGIES
Transport operators and providers that wish to send data may not have the appropriate licensing to operate a passenger vehicle in British Columbia.	As part of the Data Sharing Agreement and service agreement negotiations, transport operators and providers must demonstrate that they meet the licensing and insurance requirements as outlined in the <i>Passenger Transportation Act</i> .
Progression in BC Treaty negotiations with First Nations may change the obligations that are required during the implementation phase. Delays in consultations interfere with project delivery.	First Nations form part of our governance structure with board level oversight, which strengthens our ability to monitor treaty negotiation progress. We will engage and work closely with First Nations through co-design of the Projects to understand and accommodate the relevant needs of the communities.



### 8.3 FREEDOM TO MOVE: FROM VISION TO IMPLEMENTATION

SIPP's "Citizen-Inspired Transformation" for Greater Victoria kicked-off over two years ago with the development of Vision 2040, which directly informed our "freedom to move" Challenge Statement guiding this Smart City Challenge proposal. Our shared vision for a new mobility future is designed by and for our citizens, and offers an innovative blueprint for how our communities, provincially and nationally, can employ smart technology—and smart citizens—to create meaningful impacts to improving mobility in our region.

The vision, planning, approach and partnership engagements that SIPP continues to lead with regional leaders and stakeholders are ambitious and targeted. The progress made to date has required a substantial amount of hard work, dedication and inspiration and has carefully informed our Smart Mobility Program, which reflects the needs and wants of our residents. Our commitment to deliver truly transformative change through our SMP mobility improvements will be evidenced by swift, well-coordinated implementation and delivery, and through our co-design process with users.

Our performance measurement framework is vital to monitoring project operations and outcomes. It embeds a validated learning approach into our overarching Smart Mobility Program to measure the effects that mobility systems can have on the physical, emotional and financial wellbeing of their users, to deliver Canada's first Mobility Wellness Index.

Our governance framework, outlined in this proposal, ensures the SMP maintains its vision, goals and integrity. Our project management model and outcome-based feedback loop will provide the quick wins required to build momentum. This will be a key element to ensuring the design and development effort with respect to features, functionality and technology solutions are not only best in class and but also inclusive of the diverse needs of users. SIPP's policy framework for data privacy and security will be central to maintaining data integrity for the public and for our partners, whilst also providing guidelines to selecting the smart technologies and innovations we employ to deliver transformative change.

We are prepared. We are excited. We are ready to win. Together, with our citizens, our leaders and our partners, we will advance this shared vision for a smart mobility future into our near-term reality where everyone in Greater Victoria has the "freedom to move."

## CHAPTER 8 LINKAGES TO OUTCOME THEMES



### Convenience

Transport and mobility within Greater Victoria becomes more convenient

SMP includes the development of technology to improve convenience of transportation



### Affordability

As transport and mobility within Greater Victoria is made more affordable, the region will become a more attractive place for small-sized, medium-sized and social enterprises to locate their businesses



### Inclusivity

SIPP engaged 10 First Nations communities

CEB for Indigenous people and persons with disabilities

Partnership of small-sized, medium-sized and social enterprises will ensure the mandate of providing sustainable and inclusive economic prosperity in the region



# SMART SOUTH ISLAND

## Citizen-Inspired Transformation



It would be impossible to list the countless individuals who made this proposal what it is, but we are deeply grateful for their contributions, particularly our members and their representatives. We would like to take this opportunity acknowledge the leadership and hard work over the past two years of the Steering Committee: Emilie de Rosenroll (Chair, CEO, SIPP), Lisa Helps (Mayor of Victoria), Erinn Pinkerton (CEO, BC Transit), Sean Midwood (SIPP Board Member), Christina Clarke (Executive Director, Songhees Nation) and Ken Armour (Councillor, Esquimalt), as well as the Partners Committee: Lisa Helps (Chair, Mayor of Victoria), Fred Haynes (Vice-Chair, Mayor of Saanich), Kevin Murdoch (Mayor of Oak Bay), Ken Armour (Councillor, Esquimalt), David Screech (Mayor of View Royal), Rob Martin (Mayor of Colwood), Cliff McNeil-Smith (Mayor of Sidney), Celia Stock (Councillor, North Saanich), Bob Thompson (Councillor, Central Saanich), Ken Williams (Mayor of Highlands), Maureen Sawa (CEO, Greater Victoria Public Library), Christina Clarke (Executive Director, Songhees Nation, Sean Midwood (SIPP Board Member) and Rob Janus (Director of Communications, Victoria Foundation).



# **I believe in Smart Mobility**

**I believe in  
affordable, easy and  
convenient transit.**

**I believe  
a shorter commute means  
more time doing what I love.**

**I believe in  
bringing people, communities,  
and municipalities together.**

**I believe that  
new technologies that  
will simplify our lives.**

**I believe in  
the #FreedomToMove.**

**I believe in  
putting Greater Victoria at the  
leading edge of transportation.**

**I believe in  
transportation options  
for the entire region.**

**I believe in  
creating a better world  
for future generations.**

**I believe in  
ushering in a new  
era of transportation.**

Help Greater Victoria win \$10 million for transportation  
innovation in Canada's Smart Cities Challenge.

**Sign the manifesto by March 1<sup>st</sup> at  
[SmartSouthIsland.ca](http://SmartSouthIsland.ca)**



**SMART  
SOUTH ISLAND**  
Citizen-Inspired Transformation

An initiative by

**SOUTH ISLAND  
PROSPERITY  
PARTNERSHIP**



Chapter	Figure #	Title (in the document)	Caption (~140 characters)	Long text description (only for infographics, charts, and more complicated figures)
E.S.		Aerial view of Fort Street and Cook Street, Victoria	alt=""	
		Bike lanes and bike racks in downtown Victoria	alt=""	
		Saanich landscape	alt=""	
		Convenience icon	alt=""	
		Affordability icon	alt=""	
		Wellbeing icon	alt=""	
		Green icon	alt=""	
		Inclusivity icon	alt=""	
1	1.1	Scalability of projects	The Projects will scale from three co-design target groups to similar groups and new markets, and then to Greater Victoria and Canada.	At the start of the Smart Cities Grant, our focus will be on three initial co-design target groups including Seniors, Indigenous students and new employees. The learning that we gain from these Projects will help us scale to new markets with similar characteristics. For example, our Indigenous students target group will scale to First Nations communities, students, and rural residents. Over time, this can scale to all of Greater Victoria and then Canada.
		U-bike on electric bus at Smart Mobility Expo (October 2018)	alt=""	
		Broadening multimodal options that meet the diverse needs of Greater Victoria residents	alt=""	
		Indigenous student user journey 1	Jarid, a First Nations student, is standing by a bus stop on a rural road. He is leaning out into the road to see if a bus is coming.	
		Indigenous student user journey 2	Jarid uses his phone to text the Indigenous Smart Mobility service requesting back up ride to school after missing the bus.	
		Indigenous student user journey 3	Jarid is about to get into a microtransit vehicle. The student is holding on the vehicle's door handle, smiling.	
		Indigenous student user journey 4	Jarid is standing outside of Camosun College, beside a sign that reads "Camosun College Interurban Campus."	
		Senior user journey 1	Jackie, a visually-impaired senior woman, is talking on phone in her apartment kitchen.	
		Senior user journey 2	Jackie is waiting at a bus stop holding her support cane.	
		Senior user journey 3	Jackie is sitting in a coffee shop at a table with her two adult children having conversation.	
		Senior user journey 4	Jackie is holding her support cane in one hand, being guided by her adult son in front of a medical building.	
		New employee user journey 1	Neil, a new employee, is entering a Service Canada building, holding the door handle and smiling.	
		New employee user journey 2	Neil is standing on a sidewalk looking at a paper map of Victoria.	
		New employee user journey 3	Neil is standing on a sidewalk looking at an app that displays bikeshare information on his phone.	
		New employee user journey 4	Neil is standing by a bikeshare bicycle with phone in hand.	
		Student from SIPP's Future Innovator Challenge at University of Victoria	alt=""	
		Some collaborative partners at SIPP's Transportation and Mobility Stakeholder Roundtable	alt=""	
2		The LAU, WELNEW Tribal School, part of the WSANEC School Board. All 10 First Nations in the region require reliable access to school.	alt=""	
		Trip-planning smartphone application @ Arup	alt=""	
	2.1	Technology Architecture and Smart Mobility Program	Together, the three Projects are the Smart Mobility Program. Third-party transport apps, data sources, and new services are integrated in the Program.	This infographic shows the Smart Mobility Program structure highlighting the three Projects and their relationship to third party transport apps and data sources. All three projects are connected to each other via API. Data sources are connected to the SSIC. Third-party transport apps and new services can be connected to the mobility as a service microservices and SSIC data platform. The SSIC also produces outputs including maps, reports, analysis, and new insights.
	2.2	Microservice Approach	Mobility-as-a-Service services and third-party transport apps depend on mobility tools and microservices that are part of the Service API.	This infographic shows the relationship between the Mobility-as-a-Service services, third-party transport apps and the Service API. Within the Service API, there is access to a range of mobility tools, microservices, service management and analytics reporting. While these are available for use within the Service API, only a few of the mobility tools or microservices may be used by the app or service depending on user requirements.
	3.1	SMP governance and organization	Program	which is guided by a Partners Committee and the SIPP Board of Directors. There are five internal task forces that inform the Program (research, and collaborative). These partners have contributed and will continue to support the implementation of the Project.
	3.2	Implementation partners matrix	research, and collaborative partnerships for implementation.	
	4	College after signing the Participation engagement levels	empower) and brief definitions of each	
		Camosun students at pop-up poll	alt=""	
	4.1	SIPP engagement timeline and statistics	mobility since 2017.	of engagement is outlined in the colour of the marker.
		smart mobility and regional	alt=""	
		privacy and data sharing	alt=""	
5	5.1	agreements	Types of data, owners, users and agreements	APIs. These can be accessed for two main use cases: the MaaS platform or other transport applications by API, and the open data website. The
		have access to users' PII.	alt=""	
		to help develop solutions for problems	alt=""	
6	6.1	Outcomes-Based Feedback Loop	Agile approach.	measure metrics and outcomes. This enables us to predict and mitigate risk, and adjust the items for our backlog (for future development).
		run quarterly sprint reviews.	alt=""	
		Island Prosperity Index, which	alt=""	
	6.2	Project Activity Schedule	Program.	there will be a quarterly sprint review, demo, and service update to the end user. Below the three Projects are the timelines associated with
	6.3	SMP project management	specific functions. It reports to the CEO.	Evaluation, Community and User Engagement, and Marketing and Communications functions. Each reports to the Program Director, who
7		even the most vulnerable	alt=""	
		Impact, we will ensure that our	alt=""	
		Trail.	alt=""	
		and affordable transportation, both to	alt=""	
	7.1	Mobility Wellness Index	40 metrics.	how well each metric is performing. A coloured square closer to the centre of the circle indicates the metric is performing poorly, while a
		transit fleet.	alt=""	
8		employment opportunities in the	alt=""	
		Transformation	Cover page for SIPP's original SCC submission	showing a diversity of people at public events.
		Smart Mobility Manifesto	SIPP's Smart Mobility Manifesto	transportation in Victoria. It encourages people to sign the manifesto by March 1st at SmartSouthIsland.ca to help SIPP win the Smart Cities

**Page(s) 79 to 96  
are withheld  
pursuant to paragraph  
13(1)(d), 13(1)(e) & 20(1)(b)  
of the *Access to Information Act***

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conformément aux dispositions de paragraphe  
13(1)(d), 13(1)(e) & 20(1)(b)  
de la *loi sur l'accès à l'information***



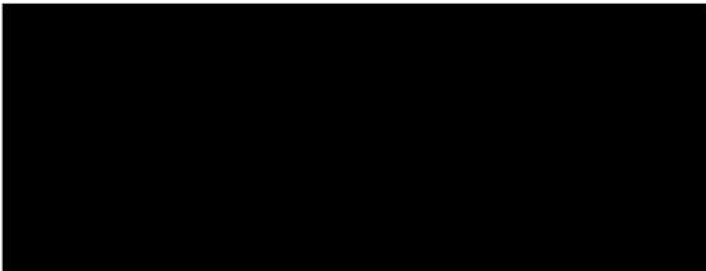
**LETTERS OF SUPPORT FOR SIPP SMART CITY CHALLENGE APPLICATION**

TABLE OF CONTENTS: Letters of support in Appendix 3 are numbered according to following list

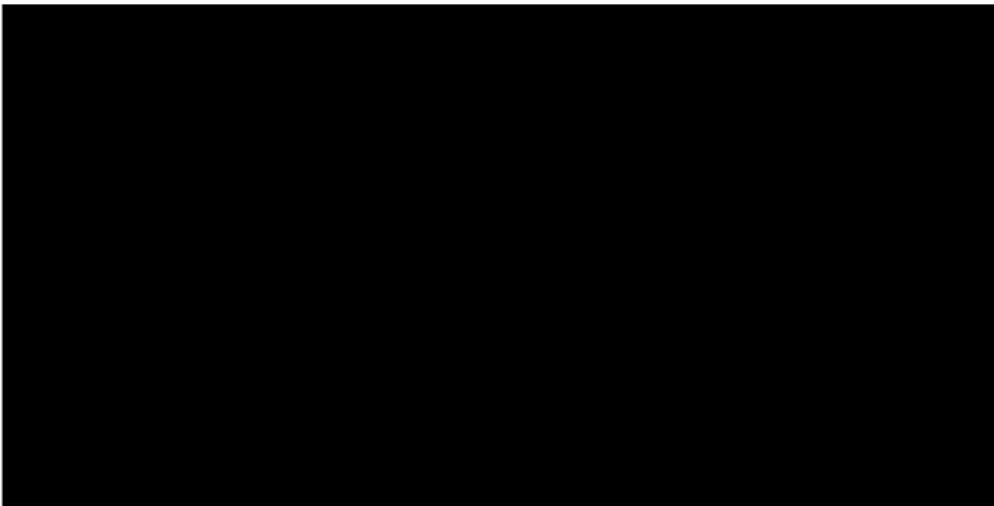
**FUNDING PARTNERS**



**PROGRAM PARTNERS**



**FUNDED DEVELOPMENT & RESEARCH PARTNERS**



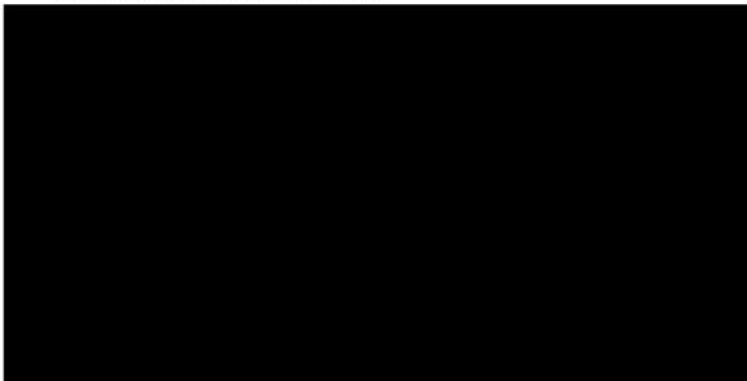


**COLLABORATIVE PARTNERS**

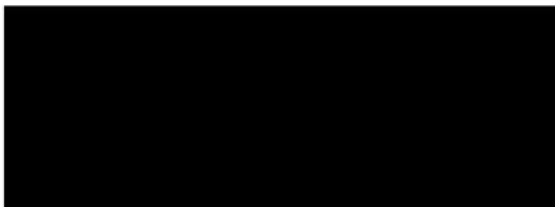
**National & International Smart Cities Partners**



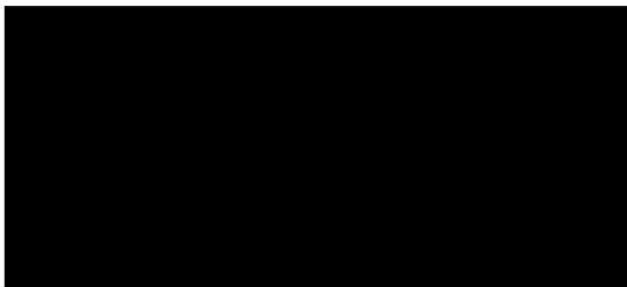
**Mobility Service Providers**



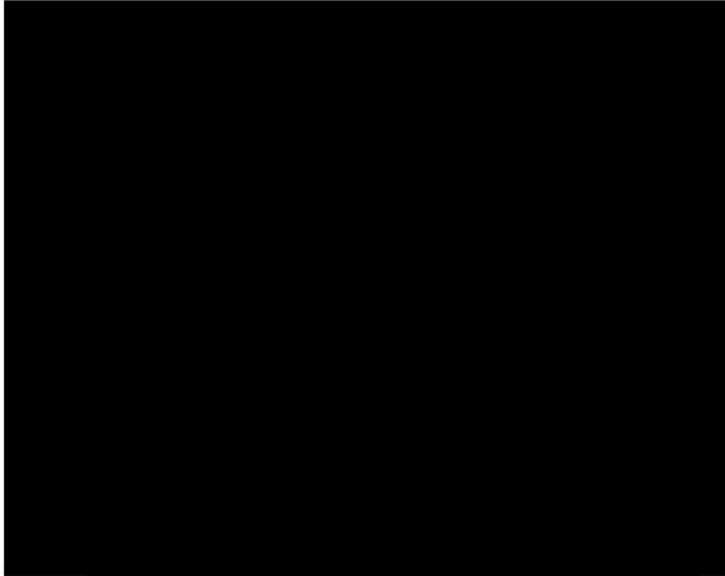
**Digital Service Providers**



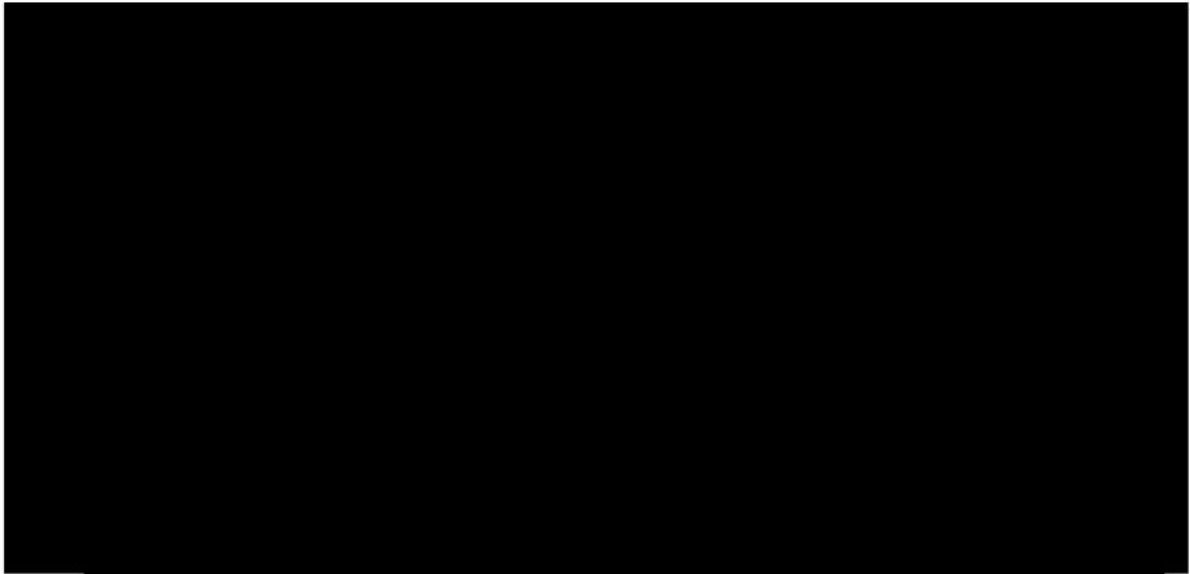
**Civil Society Community Groups**



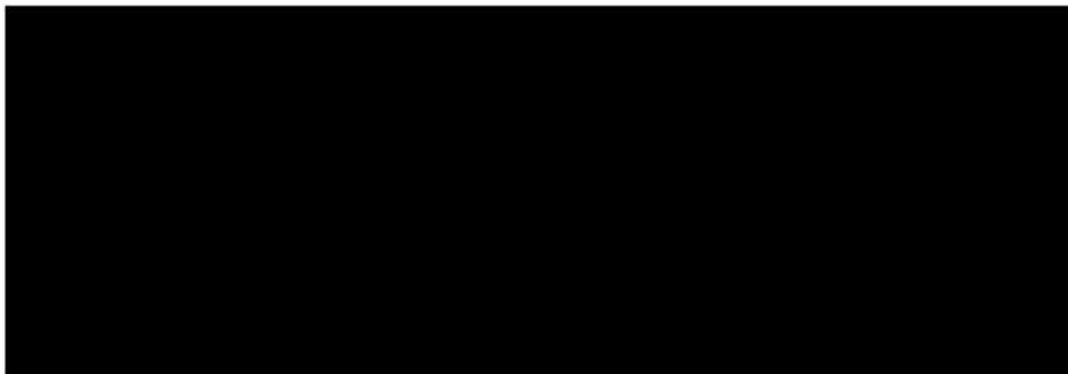




Governments

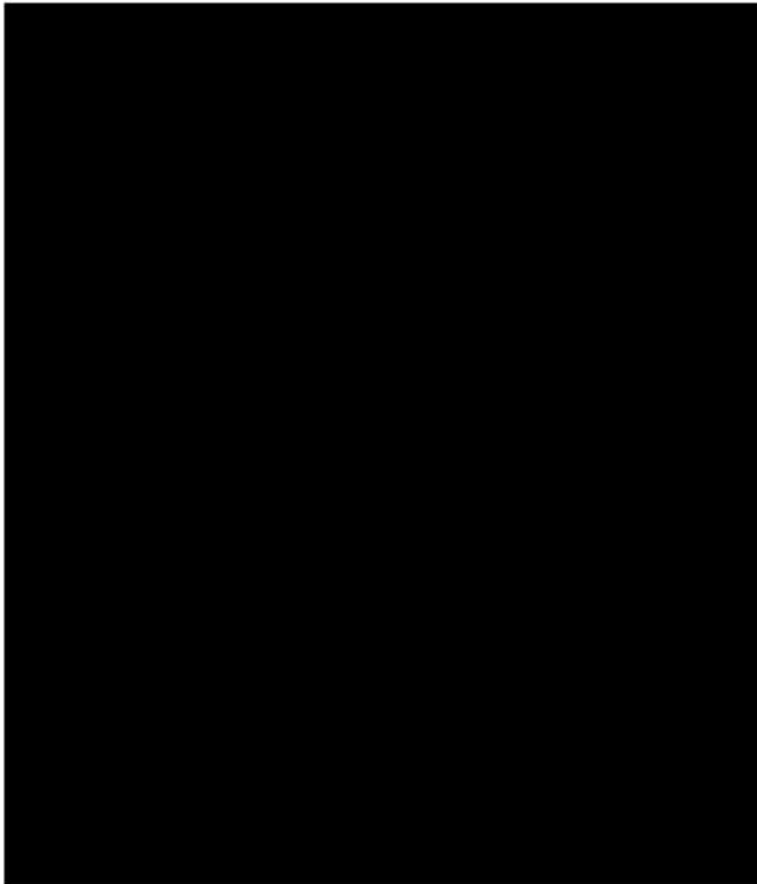


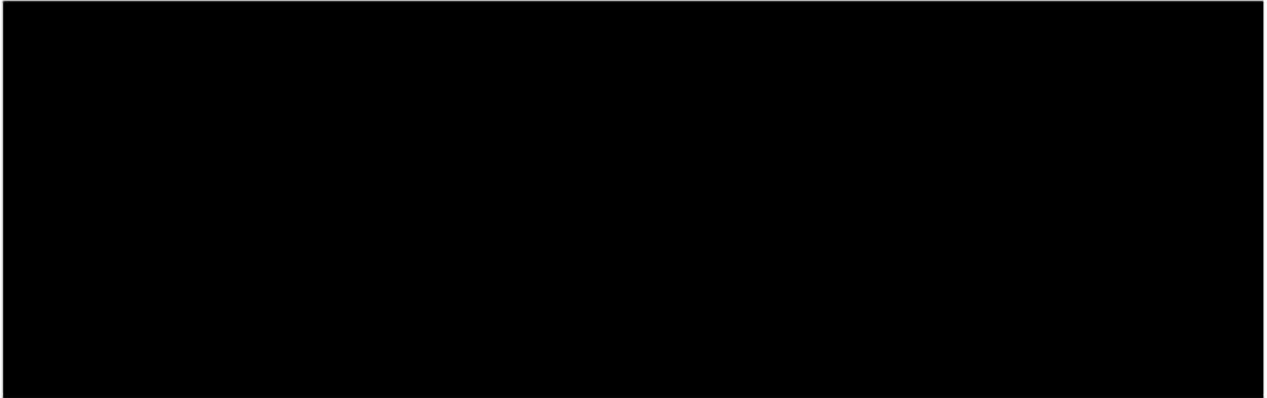
Thought Leaders





Community Partners



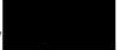


February 25, 2019

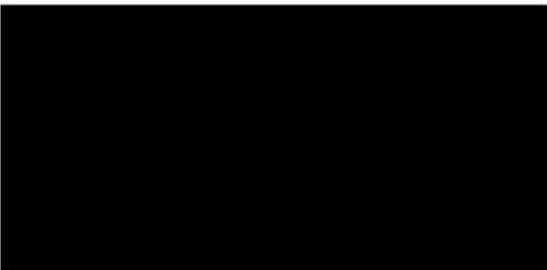
Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects. We have outlined in the attached forms our investments and support related to Greater Victoria's Challenge application.

The Project's Smart Mobility theme is both innovative and impressive. Additionally,  investments in connected and intelligent communities are key enablers that can contribute to support the South Island Prosperity Project's vision. We look forward to working with South Island Prosperity Project to improve mobility in Greater Victoria.

Sincerely,





ATIA - 13(1)(d)

ATIA - 19(1)

February 13, 2019

Dear Canada's Smart Cities Challenge Jury,

RE: Smart South Island "Smart Mobility" Proposal

[REDACTED] are excited to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects. We have outlined in the attached forms our investments and support related to Greater Victoria's Challenge application. We look forward to working with South Island Prosperity Project to improve mobility in Greater Victoria.

Best regards,

[REDACTED]

[REDACTED]

February 26, 2019

Canada's Smart Cities Challenge Jury  
[REDACTED]@SOUTHISLANDPROSPERITY.CA

Dear Jury Members:

**RE: SMART SOUTH ISLAND "SMART MOBILITY" PROPOSAL**

[REDACTED] is committed to collaborating with the South Island Prosperity Project (SIPP) team in the delivery of its Smart Cities Challenge projects in Greater Victoria. Specifically, [REDACTED] has committed to share transportation and demographic data as well as provide staff resources to SIPP-related technical and working groups.

[REDACTED]

[REDACTED]

[REDACTED]

For further information relating to [REDACTED] investments and support that may relate to Greater Victoria's Challenge application, please see the attached document.

The [REDACTED] supports the South Island "Smart Mobility" proposal and commits to continued collaboration with SIPP to improve mobility in Greater Victoria if this grant application is successful.

Sincerely,

[REDACTED]

**RE: Smart South Island "Smart Mobility" Proposal**

Dear Canada's Smart Cities Challenge Jury,

[REDACTED] is thrilled to partner with the South Island Prosperity Project (SIPP) on the delivery of the projects and initiatives outlined in their application. We believe in the freedom to move and that access to high-quality, affordable, green and inclusive transportation options will enhance the well-being of individuals and strengthen the social fabric of our community. [REDACTED] we're turning our belief into action through significant infrastructure investments and long-term sustainable mobility planning, action that very much complements the Smart South Island Smart Mobility proposal.

[REDACTED]

Early data on our first two corridors shows an average number of cycling trips per day of 1422 [REDACTED] and 823 [REDACTED] during the summer of 2018. These represent 149% and 234% increases respectively over comparable months before the AAA infrastructure was in place. [REDACTED] will continue the work of building infrastructure while the Smart South Island Smart Mobility proposal will create a "digital layer" making this infrastructure more user friendly to more people.

In addition to immediate and significant multimodal infrastructure investments, [REDACTED] developing [REDACTED], a transportation plan [REDACTED] for the next 40 years. A key element [REDACTED] will be a values-based matrix to help [REDACTED] make decisions on transportation investments. From initial consultation [REDACTED] the values that are arising to guide [REDACTED] transportation future are very much in line with SIPP's including affordability, equity and inclusion, and a strong desire to reduce carbon pollution. The [REDACTED] strategy will be informed by and will help to inform the Smart South Island Smart Mobility projects being submitted as part of the Smart Cities Challenge.



This brings us to the final and most important area of alignment: a desire to take climate action and reduce carbon pollution. [REDACTED] Climate Leadership Plan details that in order to decrease carbon pollution by 18% by 2041, we need to shift 55% of trips to walking and cycling and 25% of trips to transit. This is the [REDACTED] single most significant emissions reduction tactic. The Smart South Island Smart Mobility projects, in particular Mobility As A Service (MAAS), multimodal trip planning and a single payment platform are key to [REDACTED] success in inspiring people to shift modes to tackle the climate crisis. Convenience is key and the Smart South Island Smart Mobility projects have the capacity to make multi-modal transportation more convenient, more fun, and less isolating than traveling alone in a car.

For all of these reasons we are pleased to support the SIPP Smart Mobility proposal with aligned funding over the next five years. And we've got our fingers – and our toes! – crossed that that jury will see, as we do, that the Smart South Island Smart Mobility proposal will help us to build a more inclusive, resilient and sustainable community where people are happier and healthier because they have the freedom to move.

Sincerely and with gratitude,



[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)

[REDACTED]

February 28, 2019

[REDACTED]

Infrastructure Canada  
Smart Cities Challenge  
180 Kent Street  
Suite 1100  
Ottawa, Ontario K1P 0B6

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

---

We are excited to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects. We have outlined in the attached form our investments related to the Smart South Island proposal. We look forward to working with you in the implementation of the proposal.

Yours Truly,

[REDACTED]

[REDACTED]

cc: South Island Prosperity Project

[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)

February 26<sup>th</sup>, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects. The plans to improve the quality of life for urban residents through better city planning and implementation of clean, digitally connected technology align with [REDACTED] goals and objectives. [REDACTED]

[REDACTED] support sidewalk, trail and cycling network design and expansion; public realm, cycling infrastructure, and transit facilities; complete streets principles, and infrastructure improvement. All of which contribute to moving people in and around the City – and region – easily, sustainability, and affordably.


We have outlined in the attached form our investments related to the Smart South Island proposal. We look forward to working with you in the implementation of the proposal.

Best regards,

[REDACTED]

[REDACTED]





ATIA - 13(1)(d)

ATIA - 19(1)

February 26, 2019

Dear Canada's Smart Cities Challenge Jury:

We are very pleased to partner with the South Island Prosperity in the delivery of its Smart Cities Challenge projects. We have summarized our investments related to the Smart South Island proposal on the attached form. This is an exciting collaboration that is important to our community. We look forward to working with you in the implementation of the proposal.

Sincerely,



[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)

[REDACTED]

February 26, 2019

Dear Canada's Smart Cities Challenge Jury,

**Re: Smart South Island "Smart Mobility" Proposal**

[REDACTED] is pleased to be an active South Island Prosperity Project [REDACTED]. The regional collaboration and associated results have been unprecedented and directly contribute to improving the quality of life for all residents.

We are excited to continue this work and partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects. We have outlined in the attached form our investments related to the Smart South Island proposal.

We believe that the South Island Prosperity Project *Smart Mobility* proposal is well positioned to deliver outstanding results for the Capital region.

Sincerely,

[REDACTED]

[REDACTED]

Attach: Direct and Aligned Investments

February 25, 2019

RE: Smart South Island "Smart Mobility" Proposal

Dear Canada's Smart Cities Challenge Jury,


[REDACTED] of many, and one partner of many, in the South Island Prosperity Partnership (SIPP). Our community is thrilled to be part of the incredible cooperation and shared purpose this Smart Cities project has enabled already, and even more excited to see the impacts of this innovative project when complete.

[REDACTED] is committed to building our infrastructure for the future, to facilitate active and healthy lifestyles, and to seeing the carbon impact of our region dramatically reduced over the coming decade. We see the SIPP submission, and the regional transportation collaboration enabled by this approach, as key to our brighter future as a region.

We look forward to working with all our regional and indeed international partners in making this a truly impactful model for transportation and data-driven planning, one which can be replicated to cities and towns across Canada and around the world.

Kind regards,






February 26, 2019


Dear Canada's Smart Cities Challenge Jury:

**RE: Smart South Island "Smart Mobility" Proposal**

---

 is excited to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects.

In the attached form  has outlined  investments related to the Smart South Island proposal.  believes this is an unprecedented collaboration that is critically important to our community.

 looks forward to working with you in the implementation of the proposal.

Sincerely,



February 28, 2019

South Island Prosperity Project  
#901 – 747 Fort Street  
Victoria BC V8W 3E9

Dear Canada's Smart Cities Challenge Jury,

**Re: Smart South Island "Smart Mobility" Proposal**

[REDACTED] we are excited to be a partner in the South Island Prosperity Project's delivery of its Smart Cities Challenge projects. We have outlined our investments related to the Smart South Island proposal in the attached form.

While local and higher levels of government are investing in many forms of transportation infrastructure, our "Smart Mobility" proposal is crucial to supporting a multimodal mobility system through digital integration. We look forward to the opportunity of implementing our proposal that would bring important economic, social and environmental benefits to the South Island.

Kind Regards,



February 27, 2019

Dear Canada's Smart Cities Challenge Jury,

*RE: Smart South Island "Smart Mobility" Proposal*

I am writing on behalf of [REDACTED] to express my full support for the South Island Prosperity Project (SIPP) and its submission to Canada's Smart Cities Challenge.

[REDACTED] SIPP's 'Smart 2040 vision' that encourages inclusive, innovative, smart, and sustainable growth for the region. SIPP is leveraging the strength of its memberships to pursue initiatives that support the conditions necessary for a strong, sustainable, innovative economy that works for First Nations, nonprofits, private sector, industry and business associations and governments. We have outlined in the attached form our policy alignment related to Greater Victoria's Challenge application.

Transportation is a major issue [REDACTED] and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Sincerely;

[REDACTED]

[REDACTED]

Encl.



File: 0400.15

February 26, 2019

South Island Prosperity Project  
901 – 747 Fort Street  
Victoria, BC V8W 3E9

Dear Canada's Smart Cities Challenge Jury,

[REDACTED] excited to support the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects.

[REDACTED]  
relying on neighbouring road networks and commuting opportunities.

[REDACTED] The plan forms a vision for the District and all its initiatives and helps guide the community towards its shared vision of a successful and sustainable future. [REDACTED] includes a long-term vision within nine strategy areas. One of the strategy areas, *Transportation and Mobility*, focuses on all modes of local and regional transportation and on systems including vehicles, roads, trails, lighting, mass transit and supportive technologies, as well as opportunities for mixed-mode commuting.

Within this strategy area are Descriptions of Success which state, among other things:

- [REDACTED]
- There is an intermodal transportation system to reduce the use of automobiles.
  - A variety of transportation nodes and corridors that are safe, attractive, convenient, and well used by community members and visitors that link the Highlands to regional transportation networks.
  - An expanded network of non-motorized trails exists.
  - There are a greater number of accessible and energy efficient transportation options available.
  - Social and support networks help reduce the number of daily car trips through carpooling and assisting with errands.

[REDACTED] strongly supports the South Island Prosperity Project's application to the Federal Government's Smart Cities Challenge proposal on "smart mobility" which is focused on supporting a multimodal mobility system through digital integration, including trip planning and payment applications, that enables South Island resident to freely move around the region and is confident that SIPP has the necessary experience and resources to succeed.

ATIA - 13(1)(d)

ATIA - 19(1)

Yours truly,

[REDACTED]

[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)

February 27, 2019

Dear Canada's Smart Cities Challenge Jury,

**SUBJECT: SMART SOUTH ISLAND "SMART MOBILITY" PROPOSAL**

We are excited to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects. The project proposal aligns with key technology initiatives underway [REDACTED] including the use of open source data, fare technology integration, and greater mobility planning tools [REDACTED]

We have outlined in the attached table our investments and support related to Greater Victoria's Challenge application. We look forward to working with South Island Prosperity Project to improve mobility in Greater Victoria.

Best regards,

[REDACTED]

[REDACTED]

[REDACTED]

Attachment



[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)

February 12, 2019

Dear Canada's Smart Cities Challenge Jury,

RE: Smart South Island "Smart Mobility" Proposal

We are pleased to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects. We look forward to working with South Island Prosperity Project to improve mobility in Greater Victoria and across Canada.

[REDACTED]

[REDACTED]

[REDACTED] aligns very closely with SIPP Smart Mobility Proposal, including.

- Starts with public transport services connected to all modes of transport including walking, cycling, active transportation, sustainable shared mobility, and alternatives to transportation;
- Leverages the best of public and private sectors, integrated technology, and built environment;
- Enables door-to-door and seamless mobility throughout an urban area; and,
- Is designed for all segments of population

We understand our role in the implementation of Smart Mobility in Greater Victoria as part of this challenge will be advisory in terms of bringing the industry perspective as well as an independent review of detailed planning and operational concepts. We also expect to work with SIPP to scale the learnings and practices across Canada, leveraging our deep network in the mobility industry as well as our strong capacity in research and knowledge transfer.

Best regards,

[REDACTED]

[REDACTED]

[REDACTED]

ATIA - 13(1)(d)

[REDACTED]

ATIA - 19(1)

February 27, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

[REDACTED] is excited to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects. [REDACTED] unprecedented level of sharing and collaboration SIPP has achieved amongst the SIPP membership. This achievement has opened the door to explore new and innovative ideas to solve challenges facing the region.

[REDACTED] Getting representatives from diverse private companies, various levels of government (Federal, Provincial, Regional, Municipal, Indigenous), NGOs and Academic Communities sharing and collaborating to find holistic solutions that far exceed any one member's capabilities, is what we believe is required to be a Canadian "Smart City". We believe the collaborative approach SIPP has promoted from the beginning is a crucial element to its success in helping drive innovation and improvements in overall mobility and quality of life for the region.

[REDACTED] We are excited to be part of the growing success of SIPP and look forward to working with South Island Prosperity Project to improve mobility in the Southern Vancouver Island region. Beyond making a difference in this region, we are excited to share the success and experience SIPP has with other municipalities across Canada and the rest of the world, to extend the positive impact of this work as far as possible.

Best regards,

[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)

February 26, 2019

**RE: Smart South Island “Smart Mobility” Proposal**

Dear Canada’s Smart Cities Challenge Jury,

We were pleased to collaborate with, and invest in, the South Island Prosperity Project in furthering the Mobility Wellbeing Index (MWI) [REDACTED]

[REDACTED] helping cities around the world understand and measure their capacity to endure, adapt and transform and we see the MWI as equally scalable on a global scale.

We see Smart Mobility as being transformational to our cities and regions and we have also been pleased to assist SIPP in accelerating the planning for the implementation of Smart Mobility and citizen inspired innovation.

We have outlined in the attached forms our investments and support related to Greater Victoria’s Challenge application. We look forward to working with South Island Prosperity Project to improve mobility in Greater Victoria.

[REDACTED]

[REDACTED]

[REDACTED]



[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)

[REDACTED]

21 February 2019

South Island Prosperity Project  
901-747 Fort St.  
Victoria, BC V8W 3E9



SOUTH ISLAND  
"SMART MOBILITY" PROPOSAL

1. We are excited to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects. We have outlined in the enclosed form our support related to Greater Victoria's Challenge application. We look forward to working with South Island Prosperity Project to improve mobility in Greater Victoria.

[REDACTED]

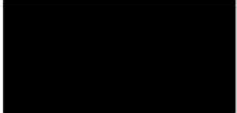
[REDACTED]

Enclosure: 1



ATIA - 13(1)(d)

ATIA - 19(1)



**February 26, 2019**

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects. We have outlined in the attached forms our investments and support related to Greater Victoria's Challenge application. We look forward to working with South Island Prosperity Project to improve mobility in Greater Victoria.

Best regards,

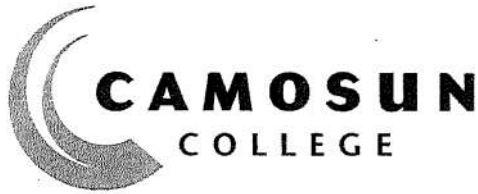


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pursuant to paragraph  
13(1)(d)  
of the *Access to Information Act***

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conformément aux dispositions de paragraphe  
13(1)(d)  
de la *loi sur l'accès à l'information***





February 20, 2019

Dear Canada's Smart Cities Challenge Jury,

As an active and enthusiastic member of the South Island Prosperity Project, Camosun College is pleased to play a role in the delivery of its Smart Cities Challenge Project proposal.

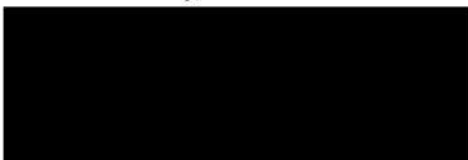
Since its founding in 1971, Camosun has played an important community building role for the Greater Victoria region. Our 20,000 learners, instructors and staff are engaged in helping to solve many of the region's sustainability issues and are deeply engaged in the transportation issue which greatly impacts the region as a whole.

Our commitment to our first nations and indigenous education has been recognized nationally by Colleges and Institutes Canada and therefore our work on creating sustainable transportation options for south island first nations is a natural fit for our work with the South Island Prosperity Project and the Smart City proposal.

We have outlined in the attached forms, our investments and support related to the Greater Victoria's Challenge application.

We look forward to continuing to work with South Island Prosperity Project to improve indigenous student mobility in Greater Victoria.

Sincerely,



Sherri Bell  
President

**Page(s) 124 to 125  
are withheld  
pursuant to paragraph  
13(1)(d), 13(1)(e), 19(1) & 20(1)(b)  
of the *Access to Information Act***

**\*\*\*\***

**La/les page(s) 124 à 125  
Font l'objet d'une exception totale  
conformément aux dispositions de paragraphe  
13(1)(d), 13(1)(e), 19(1) & 20(1)(b)  
de la *loi sur l'accès à l'information***



ATIA - 13(1)(d)

ATIA - 19(1)

February 25, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

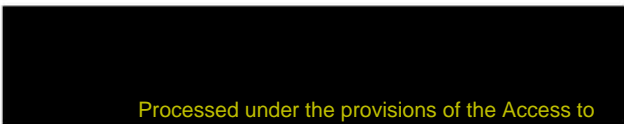
We are excited to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge.



research seeks to produce relevant knowledge that responds to global, national and community-based problems. The attached form outlines some of the research projects our faculty and students are conducting that align and support the Smart Cities Challenge application.

We believe that through innovative mobility and collaboration, SIPP's Smart Mobility Proposal will enhance the lives of the citizens of Greater Victoria and create an environment that fosters talent, infrastructure and capabilities for future innovations.

Sincerely,





28 February 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

[REDACTED] is proud to be a founding member of the South Island Prosperity Project (SIPP), and a key research and development partner for SIPP's Smart Cities Challenge proposal.

[REDACTED]

SIPP's ambition through Canada's Smart Cities Challenge is for everyone in Greater Victoria to have "freedom to move." In turn, our Challenge Statement, as presented in our first round Challenge Submission, is to "*collaboratively create a multimodal transportation network that is convenient, green and affordable, which will boost South Islanders' mobility wellbeing score by at least 20%.*"

By 2050, the global population will reach approximately 9 billion, and 75% of us will be living in cities. The SIPP proposal for the Smart Cities Challenge focuses on smart mobility, and includes three initiatives designed to address citizen wellbeing and economic resilience with more convenient, diversified, and sustainable transportation solutions to leverage, commonly known as 'smart' technology and data. With urban areas, like the Greater Victoria region, increasingly being recognized as the source and potential solution to global environmental challenges [REDACTED] is working hard with its many partners to develop solutions and build strategies for green, sustainable, resilient cities.

We are excited to support and partner with SIPP in the delivery of its Smart Cities Challenge projects. We have outlined in the attached form our investments and support related to Greater Victoria's Challenge application.

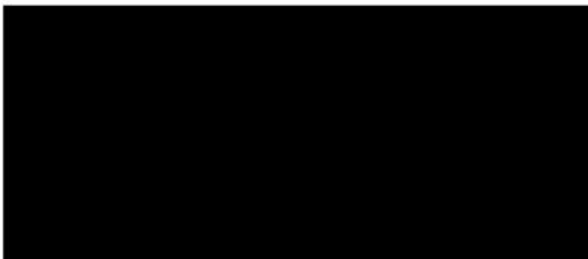
[REDACTED]

[REDACTED] is pleased to be working with SIPP to improve mobility in Greater Victoria. We are strongly supportive of SIPP's Smart Cities Challenge application and look forward to deepening our partnership to achieve transformative results for the region and the lives of its residents.

Best regards,

[REDACTED]

[REDACTED]



February 28, 2019

**RE: Support for Smart South Island “Smart Mobility” Proposal**


To the Members of Canada’s Smart Cities Challenge Jury:




As such, we are extremely supportive of the South Island “Smart Mobility” proposal as it directly aligns with our research focus going forward. Smart, integrated mobility is in its infancy, but with tremendous potential both for emissions reduction and greatly enhanced transportation services and economic development.

We have outlined in the attached forms a number of research projects that are related to Greater Victoria’s Challenge application and can support its success. We look forward to working with South Island Prosperity Project to improve mobility in Greater Victoria.

Yours sincerely,





ATIA - 13(1)(d)


ATIA - 19(1)

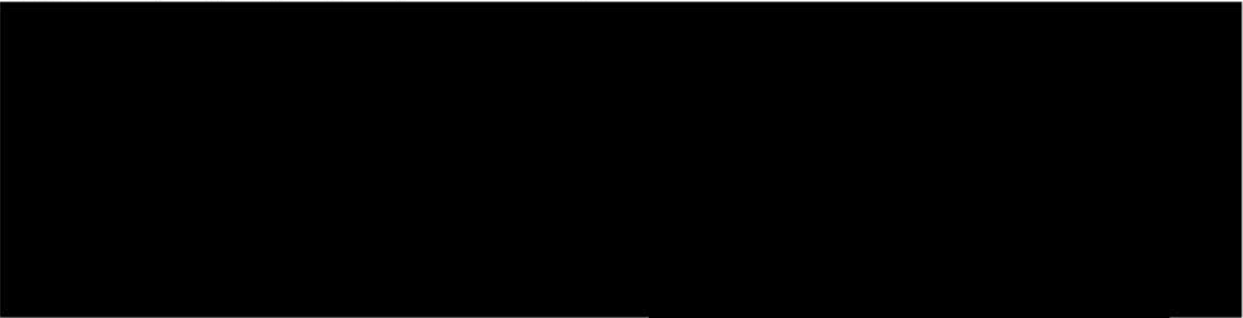
Members of the Jury  
Canada's Smart Cities Challenge  
Infrastructure Canada  
180 Kent Street  
Suite 1100  
Ottawa, Ontario  
K1P 0B6

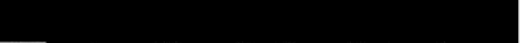

February 27, 2019

RE: Smart South Island "Smart Mobility" Proposal

Dear Members of the Jury,

 is excited to partner with the South Island Prosperity Project (SIPP) in the delivery of its Smart Cities Challenge projects.



The smart cities initiative is a welcome opportunity   to access real world data and to work with real world applications that make our city a better place to live. We look forward to the potential insights and innovation we expect to develop from this initiative and from the data commons we see being developed from the project. We look forward to working with South Island Prosperity Project to improve mobility in Greater Victoria.

Best regards,





[REDACTED]

25 February, 2019

Jacques van Campen, Director Strategic Initiatives  
SOUTH ISLAND PROSPERITY PROJECT

ATIA - 13(1)(d)

Dear Jacques,

ATIA - 19(1)

**Smart Mobility Proposal**

I'm writing to express my support and huge enthusiasm for the Smart Island Prosperity Project's Smart Mobility Proposal. I have been extremely impressed by the high degree of community engagement that SIPP has undertaken in preparing this proposal – including many interactions [REDACTED]

[REDACTED] The rest of this letter will speak to the tremendous synergy between the Smart Mobility Proposal and activities [REDACTED] but I also want to commend SIPP for the professional and highly consultative approach taken in preparing the proposal.

[REDACTED]

The award of the Smart Mobility Project would be a huge benefit for us in attracting the most talented smart cities researchers as we continue to grow. Access to data, and opportunities to develop and apply new algorithms to solve societal challenges [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



My sense is that the next step forward in the data analysis to support the transition to low carbon cities is the development of *real-time* energy and greenhouse emissions monitoring for cities. I am confident that the Smart Mobility project will be a big step towards this goal for the Greater Victoria Area.

ATIA - 19(1)

ATIA - 13(1)(d)

Sincerely,

[REDACTED]

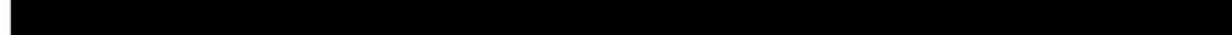



March 2, 2019

Dear Canada's Smart Cities Challenge Jury,

RE: Smart South Island "Smart Mobility" Proposal


We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. 

 The work SIPP is doing is taking the correct precautions and approach into account to achieve ethical and secure private data management.



Victoria and SIPP are critical partners in order for this work to be executed successfully, and we look forward to collaborating with them throughout development and implementation.

Best regards,



Date March 2, 2019



ATIA - 13(1)(d)

ATIA - 19(1)

February 13, 2019

Dear Canada's Smart Cities Challenge Jury,

RE: Smart South Island "Smart Mobility" Proposal

[REDACTED] pleased to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects. [REDACTED] on improving mobility and the overall livability of our region, we see Greater Victoria's Challenge application as a perfect fit with our social purpose - to transform communities by connecting people with places in a way that's affordable, convenient, inclusive and sustainable.

[REDACTED]

We look forward to working with SIPP and all its partners to make a positive and lasting impact on the mobility landscape of the region.

Warm regards,

February 25th, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects. We can't wait to be part of a Smart City that takes on sustainable and environmentally-friendly initiatives. [REDACTED] shares its values in bringing a green, convenient and affordable mode of transportation in Smart South Island's "Smart Mobility" Proposal for the residents of Greater Victoria.

We are continuously working to enhance urban mobility with eco-friendly commuting solutions. [REDACTED]

[REDACTED]

We are excited to partner with South Island Prosperity Project in offering healthier, affordable and easier modes of transportation that also builds a community. We look forward to working with South Island Prosperity Project to improve mobility in Greater Victoria.

Best regards,

February 13, 2019

ATIA - 19(1)

ATIA - 13(1)(d)

Dear Canada's Smart Cities Challenge Jury,

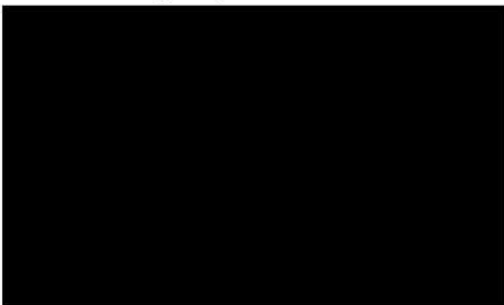
**RE: Smart South Island "Smart Mobility" Proposal**

We are excited to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects. We have outlined in the attached forms our investments and support related to Greater Victoria's Challenge application.

Over the last months we have established a close relationship with South Island Prosperity Project. During one of the last workshops, we were quite impressed by the broad range of organizations that were actively engaged, and the level of involvement of all parties. The effort put in by SIPP in ensuring all stakeholders are fully vested in this project, and that the public good is kept front and centre is second to none. This workshop and subsequent discussions have been, by far, the best first-hand experience we had dealing with similar initiatives across Canada and United States.

We look forward to working with South Island Prosperity Project to improve mobility in Greater Victoria.

Best regards,





[REDACTED]

February 28, 2019 [REDACTED]

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

[REDACTED] excited to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects.

The ability of residents to efficiently, quickly and safely move within our region, particularly in an area such as Southern Vancouver Island, which is diverse and separated into many local communities and municipalities is crucial to the long term economic, environmental and population health and wellness sustainability of this area.

[REDACTED]

[REDACTED] has outlined in the attached forms our activities aligned with and related to Greater Victoria's Challenge application. We look forward to working with the South Island Prosperity Project to improve mobility in Greater Victoria.

Best regards,

Selection Committee  
Smart Cities Challenge  
Infrastructure Canada

February 26, 2019

Dear Selection Committee:

**RE: Letter of Support to the South Island Prosperity Project's Proposal for Greater Victoria**

[REDACTED]

The overarching goal of the SIPP proposal to collaboratively create a green, affordable and convenient multimodal transportation network is a welcome and vital mission for Greater Victoria. The proposal includes a multi-pronged approach of using smart city technology to inform public progress, to enable planning tools for civic partners, and to create an environment for groups like ours to conduct research and create new innovations. In our view, these are the essential pillars of a successful urban mobility strategy in the 21<sup>st</sup> century and should lead to drastic improvements for the region and to exportable innovations of value to Canada.

With focus on disciplines including data management and mining, privacy, security and ethical issues associated with large-scale data from diverse sources, our vision [REDACTED] has strong overlap with the SIPP plan. [REDACTED]


[REDACTED]

Cities like Greater Victoria, both across Canada and around the world are struggling to remain competitive and livable while navigating stresses such as population growth and climate change. The collaborative and focused approach in this proposal is essential to creating solutions and new innovations that will work in situ and why we are writing to offer our support. We strongly, and without reservation support this initiative. Please do not hesitate to contact us for further information.

Sincerely,

[REDACTED]

[REDACTED]



ATIA - 13(1)(d)

ATIA - 19(1)


February 20, 2019

Dear Canada's Smart Cities Challenge Jury,

RE: Smart South Island "Smart Mobility" Proposal

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects and their commitment to creating barrier free transportation. We have outlined in the attached forms our policy alignment and support related to Greater Victoria's Challenge application. We know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Best regards,





ATIA - 13(1)(d)

ATIA - 19(1)

February 20, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects. We have outlined in the attached forms our investments and support related to Greater Victoria's Challenge application. We look forward to working with South Island Prosperity Project to improve mobility in Greater Victoria.

[REDACTED] we look forward to increasing options with projects like this that will help build the infrastructure to make it feasible. [REDACTED]

Thank you,

**Page(s) 140 to 141  
are withheld  
pursuant to paragraph  
13(1)(d) &19(1)  
of the *Access to Information Act***

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**La/les page(s) 140 à 141  
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conformément aux dispositions de paragraphe  
13(1)(d) &19(1)  
de la *loi sur l'accès à l'information***



February 27, 2019

Dear Canada's Smart City Challenge Jury,

On behalf of [REDACTED] I am writing to express support for the South Island Prosperity Project (SIPP) application for Canada's Smart City Challenge.

[REDACTED]

[REDACTED]

[REDACTED] Together, we are dedicated to transforming our city into the national leader in mobility innovation and sharing our learnings globally, with partners like the SIPP.

The SIPP, representing 51 partners in Greater Victoria, including municipalities, First Nation communities, large employers, postsecondaries, and non-profit organizations, is building a coalition of partners, which will be essential to the successful delivery and sustainment of smart mobility solutions. We look forward to deepening our partnership with the SIPP through best practice sharing, peer learning exchange and mentorship.

Sincerely,

[REDACTED]





Le 27 février 2019

ATIA - 13(1)(d)

ATIA - 19(1)

Madame Emilie de Rosenroll  
Présidente-directrice générale  
South Island Prosperity Project  
901 - 747 Fort Street  
Victoria (Colombie-Britannique) V8W 1E3

Madame la Présidente-Directrice générale

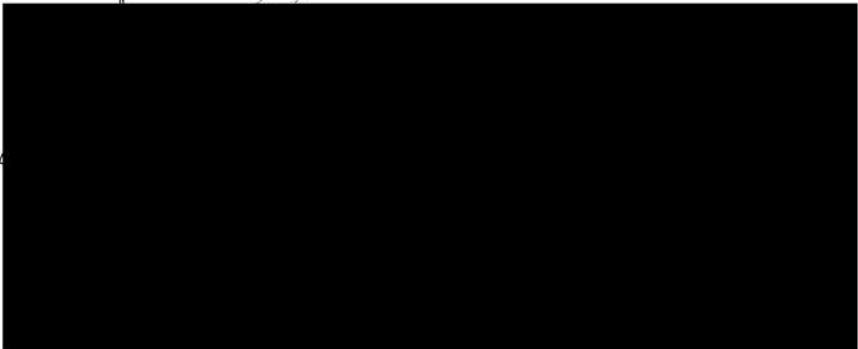
Je suis heureuse d'appuyer la candidature de la région de Victoria et de ses partenaires au Défi des villes intelligentes du Canada. Le rôle des administrations municipales consiste entre autres à faciliter les échanges d'idées et à promouvoir le partage d'expertise. Bien que [REDACTED] la région de Victoria détiennent des réalités différentes, elles peuvent certainement bénéficier du partage de leurs expériences.

L'exercice de préparation au Défi des villes intelligentes nous a obligés à identifier les priorités pour notre région respective, dont certaines se sont avérées similaires. La mise en commun de notre travail nous aura d'ailleurs permis de présenter des dossiers plus étoffés et des propositions susceptibles de s'appliquer à l'ensemble des villes canadiennes, peu importe leur taille.

Le dialogue qui s'est établi me laisse croire que nous saurons poursuivre, au-delà de ce partenariat ciblé, cette profitable collaboration, notamment pour des projets en mobilité intelligente. Je profite de l'occasion pour offrir notre contribution à l'outil *Wellbeing Mobility Index* sur lequel vous travaillez. Nous serions ravis de partager notre expérience et notre expertise en matière d'analyse de données et d'intelligence artificielle. Nous voyons également des occasions de partenariat en ce qui a trait à la transformation durable des habitudes de déplacement. D'ailleurs, l'initiative *Smart Mobility Manifesto* que vous avez lancée suscite notre intérêt, puisqu'elle mobilise les citoyennes et les citoyens autour d'enjeux de mobilité durable.

Une ville intelligente sait tirer profit de l'ingéniosité et de la créativité collective pour mieux répondre aux besoins de sa population. Nous serons enchantés de partager avec vous nos connaissances et les résultats de certains travaux sur des questions d'intérêt commun.

En espérant avoir le plaisir de poursuivre notre collaboration, je vous prie d'agréer, Madame la Présidente-Directrice générale, mes sincères salutations.



February 18<sup>th</sup> 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

It is with great pleasure and privilege that we can link with, learn from and collaborate with the South Island Prosperity Project as [REDACTED] collaborative partner. In delivering its Smart City Challenge projects, we are excited to see how those [REDACTED] bonds will be strengthened, and help us both in the future. We are also looking forward to working with other partners in Greater Victoria when the opportunity arises.

Challenges such as new approaches to mobility; how we adapt our cities with technology; and how we serve the need of citizens are important for cities such as ours and the world as a whole. Having shared a platform with South Island Prosperity Project [REDACTED] [REDACTED] we are fascinated at the bold and innovative approaches they are already promoting. We look forward to engaging with them and their partners as [REDACTED] collaborative partner.

Warmest regards,

[REDACTED]

Canada's Smart Cities Challenge Jury  
C/o Infrastructure Canada  
180 Kent Street  
Suite 1100  
Ottawa,  
Ontario K1P 0B6

Date: 28<sup>th</sup> February 2019

Dear Canada's Smart Cities Challenge Jury,

We were very interested to hear about the South Island Prosperity Project presented to the Smart Cities Challenge projects for Infrastructure Canada.

The focus on targeted Mobility as a Service implementations within a strong ecosystem is strongly aligned to our own approach. The engagement with technical, service and user organisations around a smart cities platform which is scalable and inclusive is of great interest to us.

A major challenge however, will be that while the work is underway traffic problems across the city could be significantly worsened with traffic diverted through neighbourhoods causing worsening air pollution.

already has access to real time traffic data derived from mobile phone use, real time air quality information to complement the traffic data is being delivered from two sources

The units are being calibrated against traditional tubes to ensure that air quality sensors can be deployed in reliable form in real time..



Contd/Canada's Smart Cities Challenge Jury

There exists a key requirement to facilitate the provision of the optimal arrangements for communicating messaging to those travelling into the city to help reduce the traffic impacts of the construction of the [REDACTED] improvement scheme.

In support of this approach [REDACTED] are current procuring a smart city platform to co-ordinate all data systems in operation within the city.

Raising awareness of the contribution that alternate means of transport into the city can offer to both reduce the traffic impact of the works and contribute to improvements in health and are key aspirations

We are very interested in being engaged with you and sharing learnings as you move forward with your important project.

We look forward to being part of your ecosystem.

Yours sincerely,

[REDACTED]

February 20, 2019.

South Island Prosperity Project (SIPP)  
#901 - 747 Fort Street  
Victoria, BC  
V8W 3E9

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project (SIPP) and all of its collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a leader in smart mobility solutions, we know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

[REDACTED]

[REDACTED]

[REDACTED]

We also see early evidence supporting the idea that shared mobility options can help to reduce car ownership and dependence. [REDACTED] are almost 40% more likely to live in zero-car households than their neighbours.

The advantages offered [REDACTED] can help SIPP and Victoria meet its Smart City goals. [REDACTED] prides itself in being a partner with municipal and provincial governments across Canada and looks forward to continuing to work with SIPP.

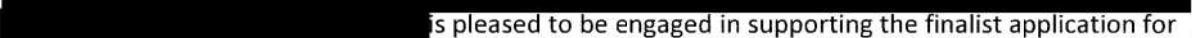
Sincerely,

[REDACTED]

February 27, 2019

Dear Canada's Smart Cities Challenge Jury,

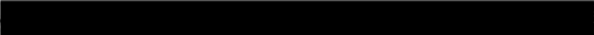
**RE: Smart South Island "Smart Mobility" Proposal**

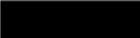


is pleased to be engaged in supporting the finalist application for the Federal Government's Smart Cities Challenge through the South Island Prosperity Project organization. This comprehensive "smart mobility" proposal is focused on facilitating better movement on Vancouver's South Island for the benefit of all of its residents and visitors.

The South Island Prosperity Project is committed to increasing mobility system deployment, digital mobility platform development, infrastructure development & deployment, policy development related to smart cities, and initiatives designed to make our mobility options greener, more efficient and cost effective in our region. The financial support of the funding from the Smart Cities Challenge, will act as a catalyst for realizing these important objectives.

The innovative "smart mobility" proposal is mainly focused on supporting a multi-modal transportation Island residents and visitors to move freely around the region.

As a collaborative partner  is excited to support the South Island Prosperity Project in the development of initiatives for streamlining transportation and improving mobility on Vancouver's South Island.

To that end,  supports the final application from The South Island Prosperity Project for the Federal Government's Smart Cities Challenge and we are looking forward to experiencing the outcomes of these proposed initiatives to increase mobility throughout South Vancouver Island.

Sincerely,



February 25th, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a major stakeholder in Greater Victoria, we know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

I have met with the South Island Prosperity team and I have full confidence in their skills, experience and commitment to the project.

Best regards,



ATIA - 13(1)(d)

ATIA - 19(1)

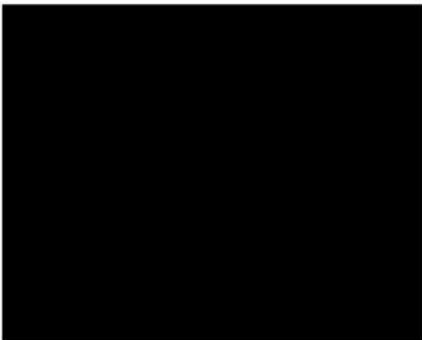
February 27, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project (SIPP) and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a key stakeholder in the Greater Victoria region, we know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Sincerely,



February 27, 2019

Infrastructure Canada  
Canada's Smart Cities Challenge Jury  
180 Kent Street Suite 1100  
Ottawa, Ontario K1P 0B6

Dear Canada's Smart Cities Challenge Jury,

**RE: [REDACTED] SUPPORTS SMART SOUTH ISLAND "SMART MOBILITY" PROPOSAL**

I am very pleased to write this letter [REDACTED] in support of the work South Island Prosperity Project (SIPP) and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects.

[REDACTED]  
recognizes the importance of transportation and providing South Island residents and visitors to freely move around the region.

[REDACTED] is committed to supporting SIPP in their application and look forward to collaborating throughout implementation.

Best regards,



March 1, 2018

Attention: Canada's Smart Cities Challenge Jury

RE: Smart South Island "Smart Mobility" Proposal

Dear Canada's Smart Cities Challenge Jury,

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. [REDACTED] is deeply committed to enhancing mobility options in the region and see synergy between the work SIPP is pursuing and our own objectives. As the region combats growing traffic congestion, the projects identified in the Smart Mobility proposal will complement our own initiatives [REDACTED]

[REDACTED] By supporting this initiative, we hope to work towards a cleaner, greener, and more convenient future for our residents. We therefore commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Yours sincerely,

[REDACTED]

[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)

February 20, 2019

Dear Canada's, Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project and all their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a key stakeholder in the Greater Victoria region, we know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

If you require additional information or have any questions regarding our support please feel free to reach out at any time.

Kindest Regards,

[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

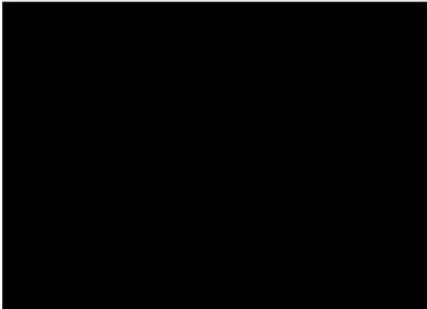
[REDACTED] are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a major stakeholder [REDACTED] we are committed to a cleaner, greener future. We recognise that transportation is a major contributor to GHG and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Regards,

[REDACTED]

[REDACTED]





ATIA - 13(1)(d)

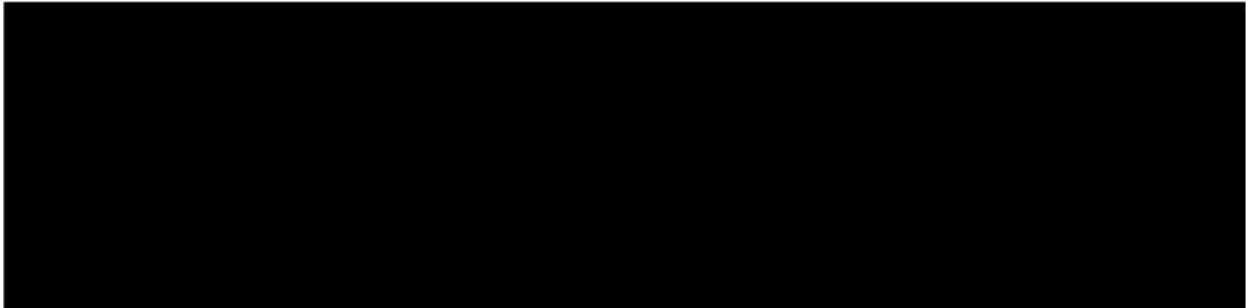
ATIA - 19(1)

February 28, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

I am pleased to write this letter of support for the South Island Prosperity Project (SIPP) and their bid in the Smart Cities Challenge.



SIPP is making innovation important in Victoria and is serious about improving multi-modal transportation for all residents. They recognise that supporting local businesses and start-ups is a key part of a thriving city, and are actively engaging the minds of young people in our city's future. We are inspired with how SIPP has already impacted Greater Victoria, and look forward to seeing the results of their many future projects and vision.

As a direct result from one of SIPP's Smart Cities initiatives, my team and I give our enthusiastic support for SIPP's application.

Kind regards,



[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)

February 27, 2019

**RE: Smart South Island "Smart Mobility" Proposal**

Dear Canada's Smart Cities Challenge Jury,

I am writing to express support for the work of South Island Prosperity Project and their collaborators in the delivery of the Smart Cities Challenge projects. [REDACTED]

[REDACTED] we understand the role sustainable and innovative transportation solutions have in creating a thriving, modern city. Our team is committed to supporting SIPP in their application, and we look forward to collaborating throughout the implementation of the initiative.

[REDACTED]

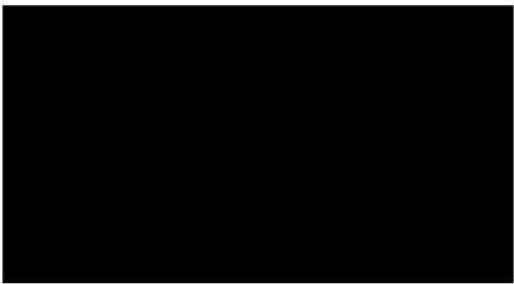
[REDACTED]

[REDACTED] seeks to improve access and ease-of-use for these multimodal options, to reduce automobile ownership with the goal of lowering household expenses, easing congestion, improving mobility, and reducing environmental impacts. These are important challenges requiring creative solutions from the private sector and all levels of government.

[REDACTED] succeeds as an alternative to car ownership when there are strong public-private partnerships. The timing is right to advance these innovations in Victoria. [REDACTED] we are pleased to support the efforts of the South Island Prosperity Project and the Smart Cities Challenge.

Best regards,

[REDACTED]



ATIA - 13(1)(d)

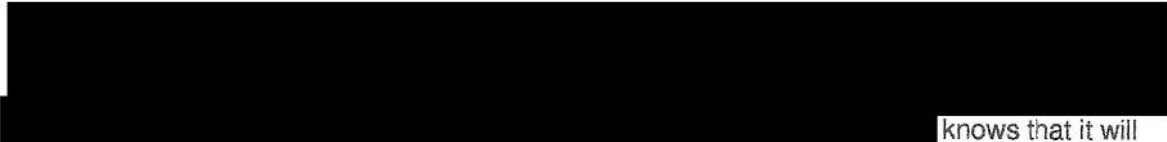
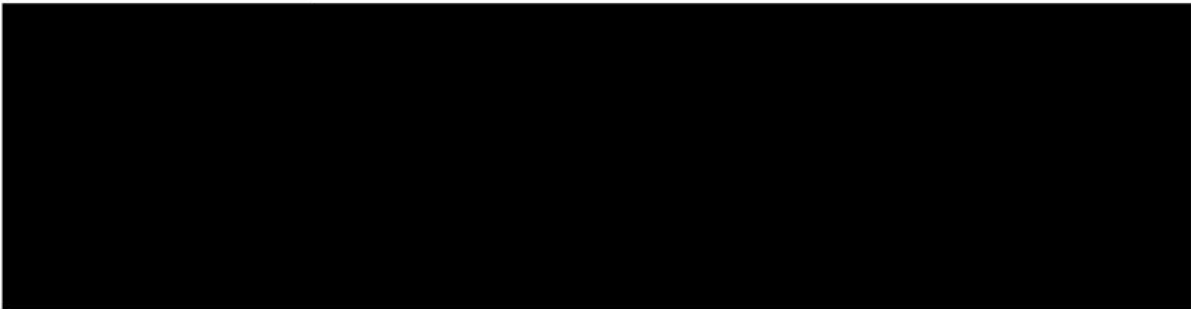
ATIA - 19(1)

**February 26, 2019**

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a leader in smart mobility solutions, we know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.



knows that it will be able to help SIPP implement services that are operationally-sound and well-conceived, with the greatest potential of cost-effective outcomes.

We are pleased to support SIPP in their proposal and are eager to work with their team to implement these leading technology platforms as part of their transportation strategies for the Smart Cities project.

Best regards,



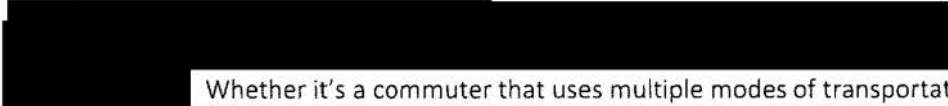



February, 28 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are very excited to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects. Transportation is a high priority issue for all citizens in this region. Supporting this project directly aligns with regional transportation initiatives, and through improved mobility indirectly helps tackle unaffordable housing in the urban core. There is a significant benefit to our organization and our region, as a result of this proposal.

-   
Whether it's a commuter that uses multiple modes of transportation to get to work, or a millennial that lives across the street and needs a combination of modes of travel to enjoy their weekend, this project provides both a great user experience and direct benefits to manage traffic flow, urban planning and climate change.

-   
It is a perfect storm for this project to be done in this location at this time and to leverage the learnings to support other citizens across Canada.

Thank you for your consideration of this letter of support, as we look forward to working with South Island Prosperity Project to improve mobility in Greater Victoria.

Best regards,



Canada's Smart Cities Challenge Jury,


We are very excited to have been engaged with the South Island Prosperity Project.

The Partnership has a strong track record for engaging major stakeholders to work together for the prosperity of the South Island. It has been impressive to see this in action. It is this partnership working which, in our experience, is the key determinant of success for any initiative aiming to deliver fundamental change.

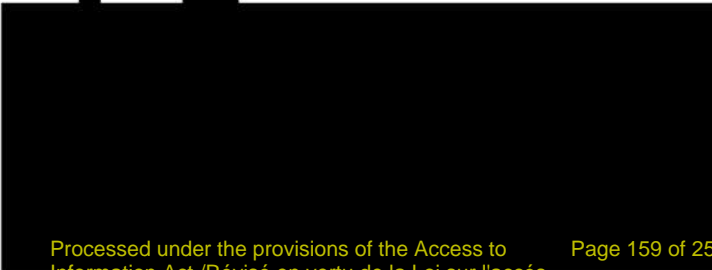
We believe that improved transport and connectivity can change the world. It can help us meet the societal, environmental and economic challenges that we face.

To do this, we believe that making the most of transit, other shared modes, cycling and walking is the key. But they need to be aggregated and personalized and integrated and flexible. This requires understanding of what people really need married with a strong enabling and integrative platform backed by an engaged ecosystem of stakeholders from all parts of the mobility value chain. This can then enable informed, convenient, affordable and sustainable transport choices.

These are all central to the SIPP proposal.



The processes, partnership, technology platform and agile approach within the SIPP proposal are ideally suited deliver a step-change in mobility: reducing stress, increasing use of transit, helping people reduce car use, enabling travel with confidence. We look forward to further engagement with SIPP; contributing to, and learning from, the project's activities and ecosystem.



[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)

February 21, 2019

RE: Smart South Island "Smart Mobility" Proposal

Dear Canada's Smart Cities Challenge Jury,

We are excited for the work South Island Prosperity Project and all their collaborators are achieving in the delivery of the Smart Cities Challenge projects.

[REDACTED]

As a major stakeholder in Greater Victoria, we know that transportation is a significant issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Sincerely,

[REDACTED]



[REDACTED]

February 19, 2019

Dear Members of Canada's Smart Cities Challenge Jury:

**RE: Smart South Island "Smart Mobility" Proposal**

[REDACTED] is excited about the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects.

[REDACTED]

As a major stakeholder in Greater Victoria, we know that transportation is a major issue and we commit to supporting the South Island Prosperity Project in their application and look forward to collaborating throughout implementation.

[REDACTED]

Sincerely,

[REDACTED]

22 February 2019

Re: Smart South Island "Smart Mobility" proposal.

Dear Canada's Smart Cities Challenge Jury:

The transition of urban transportation towards an integrated multi-modal array of offerings providing *Mobility as a Service* offers significant opportunities for reducing greenhouse gas emissions while simultaneously stimulating other co-benefits to people and communities. [REDACTED] which we see as an important part of the evolution of the built environment.

The work proposed by the South Island Prosperity Project promises to implement what our researchers understand to be state of the art concepts in mobility transformation. The plan for monitoring and evaluating results which is a core part of this proposal elevates the work from implementation to a research project in its own right, where the 'lessons learned' will have utility in informing the planning efforts of other cities that follow Victoria's lead.

We are excited for the work of the South Island Prosperity Project and all of their collaborators to proceed and are eager to engage with them as they explore and implement these smart transportation solutions.

Sincerely,

February 26, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

[REDACTED] is excited to work with the South Island Prosperity Project and all of their collaborators on future mobility projects through the Smart Mobility proposal. While at its heart a simple machine, the humble bicycle has been transformed by technology in recent years. New apps are making it easier to get onto a bike, companies can easily share bikes amongst whole communities, and better and cheaper batteries are enabling whole new groups to get on and experience biking, to name just a few of the recent trends. A win for the Smart South Island Project would help keep Victoria at the forefront of new technology, for bikes and all modes.

Thank you,



February 25, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

It is my pleasure to write this letter of support for the South Island Prosperity Partnership (SIPP)'s 'Smart Mobility' proposal.

Designed to provide the citizens of Greater Victoria with the 'freedom to move', SIPP's 'Smart Mobility' proposal is a remarkable and impressive initiative developed to ensure equitable mobility for all.

[REDACTED] is committed to building smart communities. [REDACTED]

[REDACTED]

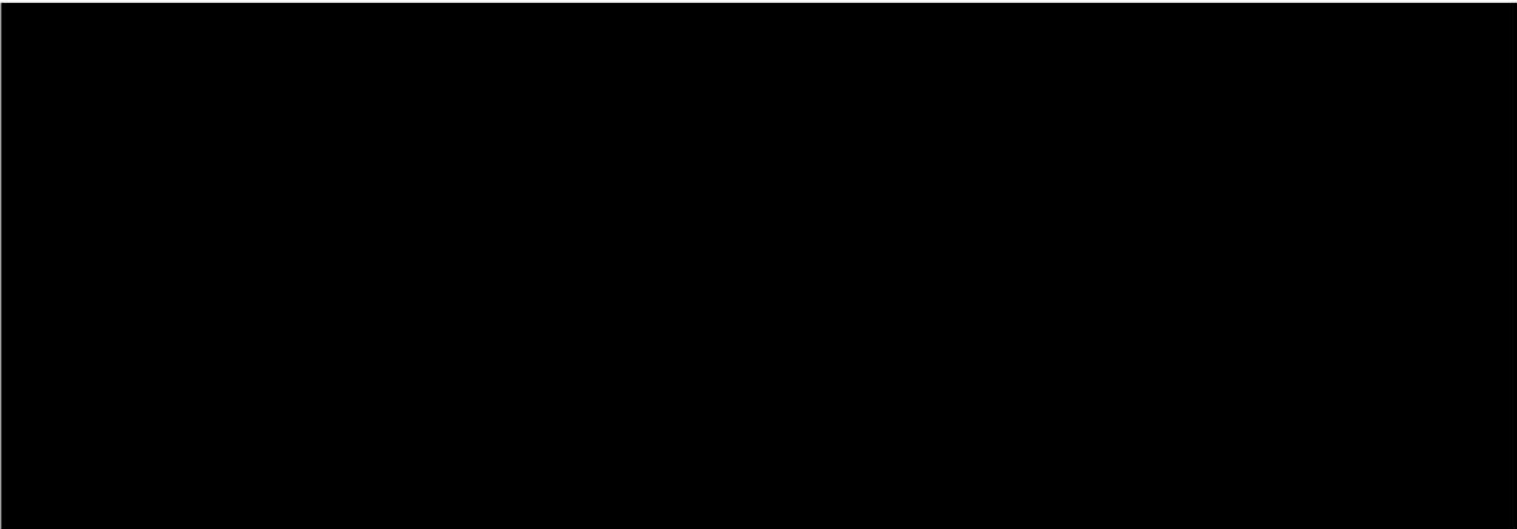
With the implementation of the 'Smart Mobility' project, residents of all ages and abilities will be assured that they will not be left behind due to the lack of affordable and convenient transportation to connect to the community resources and services they need. Smart and healthy communities need to be connected.

I am very proud to be a member of the Smart South Island Partners working group. Transportation is a major issue for Greater Victoria and I look forward to working together to create a transformative multimodal transportation network that is convenient, green and affordable.

With best regards,

[REDACTED]

[REDACTED]



February 27, 2019

ATIA - 13(1)(d)

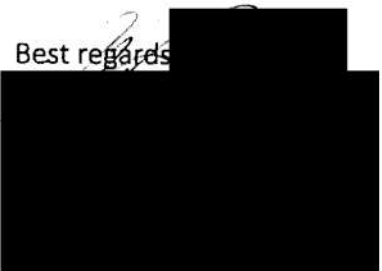
ATIA - 19(1)

Dear Canada's Smart Cities Challenge Jury,

RE: Smart South Island "Smart Mobility" Proposal

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a key stakeholder in the Greater Victoria region, we know that transportation is a major issue and we commit to supporting SIPP in their application, and look forward to collaborating throughout implementation.

Best regards



[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)

February 26th, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

[REDACTED]

With education, opportunities, and the right tools [REDACTED] contribute to places, people, ideas and causes in immeasurable ways. [REDACTED] also helps build resiliency, reduces isolation, and serves as a bridge for people to move from "where they are at" to "where they need to go."

[REDACTED]

[REDACTED] is excited for the work South Island Prosperity Project. We know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating with them throughout implementation.

Sincerely,

[REDACTED]

[REDACTED]



[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)

February 26, 2019

Canada's Smart Cities Challenge Jury  
c/o Bruce Williams  
Director of Engagement  
South Island Prosperity Project

Dear Jury Members,

**RE: Smart South Island "Smart Mobility" Proposal**

On behalf of [REDACTED] I am writing to express our endorsement of the proposed work of the South Island Prosperity Project collaborators in the delivery of the Smart Cities Challenge project. Expanding a range of transportation options in our corner of the South Island region would allow for more personal and family time, and stronger environmental health. As importantly, it also means better mobility for all citizens in the South Vancouver Region including seniors, recent immigrants, persons with a disability, Indigenous youth and students.

[REDACTED]

A low vacancy of 1.2% in the region is compounded by high housing costs and rental rates jumped 7.5% in 2018 alone. We work closely with BC Transit, but hour long commutes from outlying areas where housing is more affordable are daunting deterrents to decentralization.

[REDACTED]

We fully support SIPP in their application and are excited to have the opportunity to collaborate throughout the implementation of the project.

Sincerely,

[REDACTED]

February 17, 2019

Dear Canada's Smart Cities Challenge Jury,

RE: Smart South Island "Smart Mobility" Proposal

We are excited about the work South Island Prosperity Project, and all of their collaborators, are achieving in the delivery of the Smart Cities Challenge projects. [REDACTED]

[REDACTED] we know that transportation is a major issue that can positively and negatively impact people and our planet. The idea of opportunities for multiple means of mobility, which makes moving around easy, while saving the environment, and benefiting our wellbeing, is something the youth of Greater Victoria deeply support and value.

This application for the improvement of our transit system strongly aligns with our group's vision for the future of transportation for our community. As a result, we enthusiastically support South Island Prosperity Project in their application and look forward to collaborating with them throughout implementation.

Best regards,

[REDACTED]

[REDACTED]

[REDACTED]

ATIA - 13(1)(d)

February 15, 2019

ATIA - 19(1)

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

[REDACTED] is an enthusiastic supporter of the work South Island Prosperity Project and its collaborators are achieving in the delivery of the Smart Cities Challenge projects.

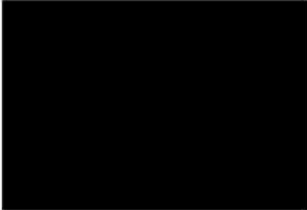
[REDACTED] issues around transportation have been advocacy priorities for many years. We know that regional transportation solutions are critically needed to help employers in Greater Victoria meet the labour demands of our vibrant economy.

[REDACTED] played a key role helping incubate SIPP, and we continue to strongly support their organization and their "smart mobility" application.

We look forward to collaborating with SIPP as they work to implement these projects.

Many thanks,

[REDACTED]



February 27, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a major stakeholder in Greater Victoria, we know that transportation is a major issue

We commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Yours sincerely,





[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)

February 28, 2019

South Island Prosperity Project  
901-747 Fort St.  
Victoria, BC

RE: **Smart South Island "Smart Mobility" Proposal**

We are pleased to provide this letter of support for the Smart Mobility proposal. We appreciate the focus on the significant transportation issues faced by our region.

[REDACTED] provides easy access to ferries and the airport which is a benefit to the businesses and residents but transit connectivity to the rest of the region is poor, and as the industrial hub of the lower south Island, we would like to do better.

Living on an Island, close to 100% of everything we use is delivered by truck and much of our waste leaves by truck. It is our hope the Smart Mobility plan will successfully address issues like reducing road and parking issues for transport vehicles while also reducing our carbon footprint.

[REDACTED]

The residents of the four First Nation communities [REDACTED] often feel isolated as their options for transportation are few. Transit schedules are not optimal and make travel to appointments or jobs very challenging. We would like to see a mobility system that better connects residents to social and economic opportunities.

We look forward to collaborating with the South Island Prosperity Project to implement this project.

Sincerely,

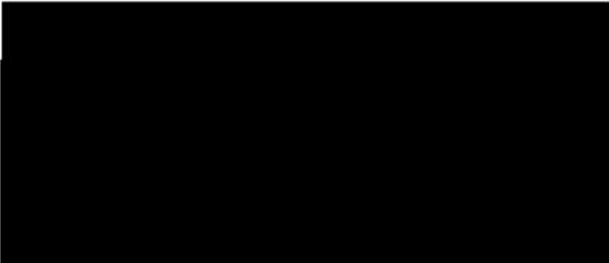
[REDACTED]

February 26, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a key stakeholder in the Greater Victoria region, we know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.



February 27, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a key stakeholder in the Greater Victoria region, we know that transportation is a major issue as we serve people from all across the region and have first hand experience with the challenges of transportation in this area.

It is in this light that we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Yours truly,




February 20, 2019

**Re: Smart South Island "Smart Mobility" Proposal**

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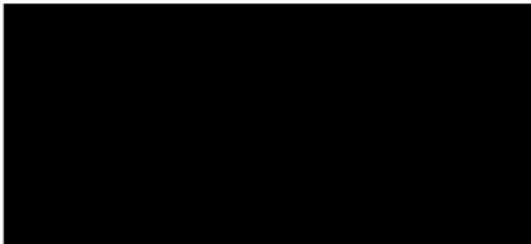
Dear Canada's Smart Cities Challenge Jury,

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. 

 we know that transportation is a major issue to address as our region continues to experience rapid growth.

We support SIPP in their application and look forward to collaborating throughout implementation.

Best regards,





ATIA - 13(1)(d)

ATIA - 19(1)

February 21, 2019

Dear Canada's, Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project and all their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a key stakeholder in the Greater Victoria region, we know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

If you require additional information or have any questions regarding our support please feel free to reach out at any time.

Kindest Regards,



**February 28, 2019**

**Dear Canada's Smart Cities Challenge Jury,**

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a key stakeholder in the Greater Victoria region, we know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

**Ssincerely,**

[REDACTED]

February 26, 2019

**Letter of support for South Island Prosperity Project**

Dear Canada's Smart Cities Challenge Jury,

We are honored to support the South Island Prosperity Project in the delivery of its Smart City Challenge projects and will continue to support their efforts as they work to improve mobility in Greater Victoria.

[REDACTED]

[REDACTED] South Island Prosperity Project's efforts will significantly address these issues, supporting our work of growing thriving, resilient communities one entrepreneur at a time. Thank you for considering their application.

Yours sincerely,

[REDACTED]

[REDACTED]

February 22, 2019

Dear Canada's Smart Cities Challenge Jury

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project (SIPP) and their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a key stakeholder in the Greater Victoria region, we know that transportation presents many opportunities and challenges. We commit to supporting SIPP in their application and look forward to collaborating throughout implementation.


Transportation is an area of focus [REDACTED] It goes without saying that Greater Victoria is located on an island. For visitors to come to the destination and travel around the destination, multiple modes of transportation are utilized. [REDACTED]

[REDACTED] SIPP's Smart Cities Challenge projects will add value to Greater Victoria as a desirable tourism destination.

Sincerely,

[REDACTED]





February 26, 2019

Smart Cities Challenge Jury  
c/o Infrastructure Canada

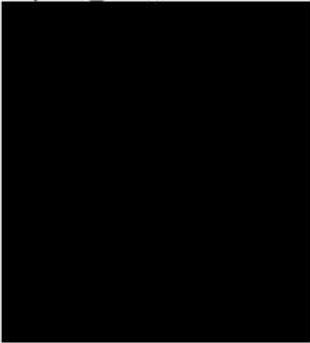
RE: Smart South Island "Smart Mobility" Proposal

Dear Challenge Jury,



we are very supportive of their participation in the Smart Cities Challenge initiative.

Transportation continues to be a major issue in Victoria and we are excited for the work SIPP and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. We commit to supporting SIPP in their application and where possible, collaborating throughout the implementation.



February 27, 2019

The Honourable François-Philippe Champagne  
Minister of Infrastructure and Communities  
180 Kent Street, Suite 1100  
Ottawa ON K1P 0B6

Reference: [REDACTED]

Dear Minister Champagne,

**Re: Smart Cities Challenge**

On behalf of [REDACTED] I want to convey support for the South Island Prosperity Project's application as a finalist for the federal Smart Cities Challenge. The South Island Prosperity Project is the economic development organization for the Greater Victoria metropolitan region with a defined mission to bolster the region's economic and social prosperity.

Smart city transportation projects can greatly enhance a community's ability to respond to climate change, create new mobility, employment and education opportunities, and increase people's participation in society.

The South Island Prosperity Project's Smart South Island application focuses on transportation and mobility to increase economic resilience and inclusion, affordability and sustainability. The project will outline a five-year plan for improving transportation and mobility in the region to increase convenience, decrease greenhouse gas emissions and increase well being. The South Island Prosperity Project organization will work with provincial, regional and local governments to bring a "smart city" approach to transportation in the region.

Transportation is a key element of the government of British Columbia's commitment to building a strong and innovative economy. This commitment and the South Island Prosperity Project's application align well with the goals of the Smart Cities Challenge.

I am confident that South Island Prosperity Project will help achieve the provincial vision of a strong, sustainable, innovative economy that works for everyone. I look forward to seeing the outcome of their Challenge application.

Yours sincerely,

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)

February 26, 2019

Greater Victoria Smart Cities Application

[REDACTED] is proud to participate in the Smart Cities Challenge. Greater Victoria's bid represents something very special happening [REDACTED]

There is a genuine concerted effort to make the world a better place for all of us. Our post secondary institutes, business community, industry groups, local governments, First Nations, and not for profit groups, are all standing together. We are pleased to have been included from the very beginning.

We see much value in the transportation and mobility initiatives included in this proposal. We see alignment with our ten-year strategic plan. Most importantly, we see great strength in the regional collaboration and we intend to keep the momentum going, in our region and beyond.

Sincerely

Feb. 27<sup>th</sup>, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

By becoming partners with SIPP we hope to find more collaborative and holistic ways of creating solutions to the issues that get in the way of building a strong, vibrant economy throughout the region and, in the unique localized interconnected hubs, such as our community.

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. [REDACTED] in the Greater Victoria region, we know that transportation is a major economic, social and connectivity issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.



**February 14, 2019**

**Canada's Smart Cities Challenge Jury**

**RE: Letter of Support  
Smart South Island "Smart Mobility" Proposal**

Dear Canada's Smart Cities Challenge Jury;

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. [REDACTED] in the Greater Victoria region, we know that transportation is a major economic, social and connectivity issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation. We believe funding such a project will be beneficial [REDACTED]

Please contact us to provide you any further information should you require.

Yours truly,

[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)

February 21, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: SMART SOUTH ISLAND "SMART MOBILITY" PROPOSAL**

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. [REDACTED] in the Greater Victoria region, we know that transportation is a major economic, social and connectivity issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Best regards,

[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)


March 1<sup>st</sup>, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. [REDACTED] in the Greater Victoria region, we know that transportation is a major economic, social and connectivity issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

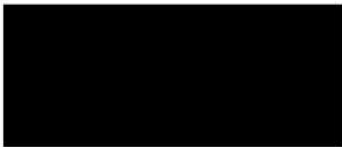
Best regards,




ATIA - 13(1)(d)

ATIA - 19(1)

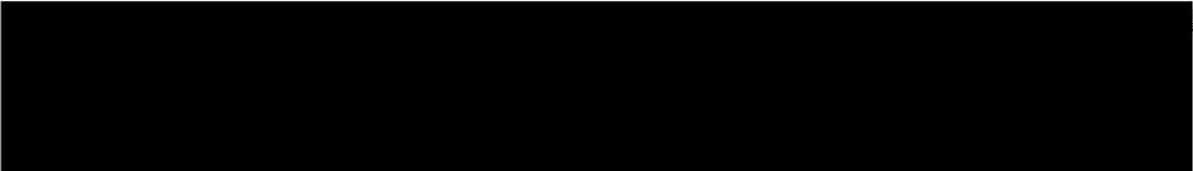
FEB 28 2019



Kieran Buggy  
FDI Concierge  
South Island Prosperity Project  
901 – 747 Fort Street  
Victoria, BC V8W 3E9  
Email: 


Dear Kieran Buggy:

Thank you for your email of February 13, 2019, regarding the South Island Prosperity Project's application under the federal Smart City Challenge.

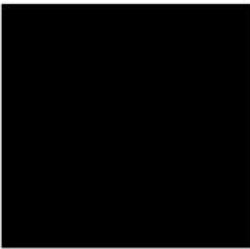


Thank you again for writing and all the best for your application.

Sincerely,








ATIA - 13(1)(d)

ATIA - 19(1)




*February 28, 2019*

Dear Canada's Smart Cities Challenge Jury:

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. Transportation is a major issue for the Greater Victoria region and the solutions developed throughout this initiative can be implemented Nation-wide. We commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Sincerely,



ATIA - 19(1)

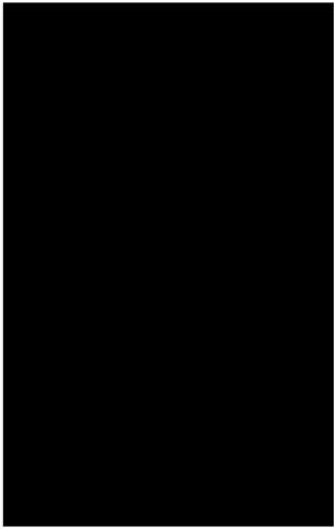

ATIA - 13(1)(d)

**February 19th, 2019**

Dear Canada's Smart Cities Challenge Jury,

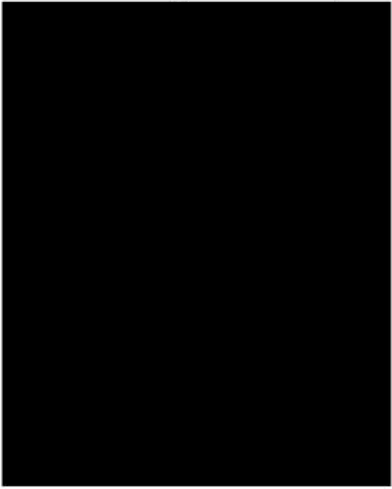
**RE: Smart South Island "Smart Mobility" Proposal**

I am excited to support the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects and will continue to advocate for South Island Prosperity Project as they work to improve mobility in Greater Victoria.



ATIA - 19(1)

ATIA - 13(1)(d)




February 21, 2019

To Whom It May Concern:


I am pleased to write this letter of support for the South Island Prosperity Project (SIPP) to improve Greater Victoria's transportation and mobility, housing and affordability, economic resiliency and inclusion, environmental health, and human health through Canada's Smart Cities Challenge.

SIPP's innovative proposal would be nothing short of instrumental to Greater Victoria, one of Canada's fastest growing regions. If realized, SIPP's proposal for Greater Victoria – submitted on behalf regional stakeholders including local governments, First Nations, secondary institutions, industry associations, non-profits and major employers – would achieve meaningful and necessary outcomes for our residents.



I ask that you please continue to give this application the attention and examination it deserves.

Sincerely,



South Island Prosperity Project  
901 - 747 Fort Street  
Victoria, BC V8W 3E9

February 20, 2019

Dear Canada's Smart Cities Challenge Jury,

I am writing this letter to express my strong support for the South Island Prosperity Project.

I know without a doubt that we are leading the way across Canada in the development of a strong and diversified modern economy.

The South Island Prosperity Project is an innovative way to further the growth and development we are experiencing on South Vancouver Island. Through collaboration with First Nations, private business, individuals and everyone in-between, this project will certainly improve the quality of life in our communities. Transportation is a major issue. Transitioning to a more affordable and green transportation system is an important strategic investment in our communities.

Sincerely,



February 22, 2019

**RE: Smart South Island "Smart Mobility" Proposal**

Dear Canada's Smart Cities Challenge Jury,

I am pleased to be writing this letter of support for the South Island Prosperity Project (SIPP) and their collaborators in their application for the Smart South Island "Smart Mobility" Proposal.

[REDACTED] I understand the "smart mobility" plan will be valuable in supporting a multimodal mobility system through digital integration, including trip planning and payment applications, that enables South Island residents to freely move around the region.

I am excited for the work SIPP and their collaborators are achieving in the delivery of the Smart Cities Challenge projects. I know that transportation is a major issue and I am committed to supporting SIPP in their application and look forward to collaborating throughout implementation.

I trust that SIPP's "Smart Mobility" proposal fits the mandate the Canada's Smart Cities Challenge and hope that it will receive careful consideration. Thank you for your time.

Sincerely,

ATIA - 13(1)(d)

ATIA - 19(1)

January 27, 2019

South Island Prosperity Project  
901-747 Fort Street  
Victoria, BC  
V8W 3E9

**Re: Smart South Island "Smart Mobility" Proposal**

To Canada's Smart Cities Challenge Jury,

I am writing in full support for Greater Victoria's Smart Cities Challenge application.

I fully understand the need to revolutionize transportation on the South Island. This need is not only because of the desire to ease people's daily lives in how they get to where they live, work, and play but also because more efficient and effective modes of transportation are essential to addressing climate change – the most pressing issue of our era.

Supporting multimodal mobility through digital integration would enable residents to more freely move around our region. The proposal of the South Island Prosperity Project's Smart Cities Challenge application is incredibly promising and I am excited for their work to start.

Transportation is one of the major issues on the South Vancouver Island. I fully support the South Island Prosperity Project's Smart Cities Challenge and look forward to collaborating throughout the implementation.

Sincerely,

February 19, 2019

BC Innovation Commissioner  
3<sup>rd</sup> Floor, 1803 Douglas Street  
Victoria, British Columbia  
V8T 5C3

Dear Canada's Smart Cities Challenge Jury,


RE: Smart South Island "Smart Mobility" Proposal

I am writing to express my full support for the South Island Prosperity Project (SIPP) and its submission to Canada's Smart Cities Challenge.

[REDACTED] I have been very impressed by SIPP's 'Smart 2040 vision' that encourages inclusive, innovative, smart, and sustainable growth for the region. SIPP is leveraging the strength of its memberships to pursue initiatives that support the conditions necessary for a strong, sustainable, innovative economy that works for First Nations, nonprofits, private sector, industry and business associations and governments. SIPP has also been instrumental in mobilizing its partners to put the region on a pathway to become more innovative, using technology and data to solve real-world challenges and improve livability for its residents.

Given that SIPP's mission is to facilitate and promote the development of a strong, diversified economy on South Vancouver Island, creating a more collaborative region and a vibrant place to work, the organization is perfectly positioned to advance the goals of the Smart Cities Challenge.

Sincerely,



ATIA - 13(1)(d)

ATIA - 19(1)

February 27, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. 

 we know that the work SIPP is doing will strongly position Greater Victoria and BC.

We are happy to commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Best regards,





[REDACTED]

ATIA - 13(1)(d)

[REDACTED]

ATIA - 19(1)

February 21, 2019

Dear Canada's Smart Cities Challenge Jury,

[REDACTED] is pleased to provide our support for the Smart South Island "Smart Mobility" proposal.

[REDACTED]

[REDACTED]

As one of our core areas of expertise is accessible and equitable mobility we are very excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. We believe in the value of creating cities that bring the community together to enhance mobility and public spaces for the wellness of its citizens.

We understand that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation of their projects.

[REDACTED] we understand the tremendous impact sustainable transportation investments can make on the quality of life for some of the most vulnerable residents. Truly "smart mobility" is one that puts residents at the center. We believe The Smart South Island team is well poised to lead this positive transformation.

Best regards,

[REDACTED]

26<sup>th</sup> February 2019

**Letter of Support – South Island Prosperity Project – Infrastructure Canada Smart Cities Challenge**

Dear Canada's Smart Cities Challenge Jury,


We were very interested to hear about the project proposal – South Island Prosperity Project – being submitted in response to Infrastructure Canada's Smart Cities Challenge.

The focus on targeted [REDACTED] implementations within a strong ecosystem is strongly aligned to our own approach. [REDACTED] the engagement with technical, service and user organisations around a scalable smart cities platform is of great interest to us.

[REDACTED]


[REDACTED] has been instrumental in securing [REDACTED] funding for a [REDACTED] Investment Fund to support a programme of pilot projects exploring the impact [REDACTED] in different use cases. We are very interested in being engaged with you and sharing learnings as you move forward with this important project. We look forward to being part of your ecosystem.

With best regards



ATIA - 19(1)

ATIA - 13(1)(d)



**February 28, 2019**


Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a key stakeholder in the Greater Victoria region, we know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Sincerely,







February 28, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. The use of connected technologies is imperative in building Smart Cities and creating innovative solutions. We know that transportation is a major issue 

 we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Please feel free to contact us if your office should require any further information.

Best regards,





[REDACTED]

[REDACTED]

ATIA - 13(1)(d)

[REDACTED]

[REDACTED]

ATIA - 19(1)

Dear Canada's Smart Cities Challenge Jury,

We were very interested to hear about the South Island Prosperity Project presented to the Smart Cities Challenge projects for Infrastructure Canada.


The focus on targeted Mobility as a Service implementations within a strong ecosystem is strongly aligned to our own approach. The engagement with technical, service and user organisations around a smart cities platform which is scalable and inclusive is of great interest to us.

[REDACTED]

We are very interested in being engaged with you and sharing learnings as you move forward with this important project.

We look forward to being part of your ecosystem.

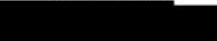
With best regards,

  
**ATIA - 13(1)(d)****ATIA - 19(1)****February 28, 2019**

Dear Canada's Smart Cities Challenge Jury,


**RE: Smart South Island "Smart Mobility" Proposal**

We are excited over the opportunity to support the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects. 

 is committed to staying on the forefront of innovation and forward-thinking technologies and solutions. MaaS solutions that address mobility challenges for cities is a critically important global issue for the livability and sustainability of our urban environments. We recognize, and support the efforts of the Smart South Island 'Smart Mobility' proposal to help to address these critical pressing issues that we see globally.

Thank you for your consideration of this letter of support, as we look forward to working with South Island Prosperity Project to improve mobility in Greater Victoria.

Best regards



[REDACTED]

ATIA - 13(1)(d)

[REDACTED]

ATIA - 19(1)

Dear Canada's Smart Cities Challenge Jury,

**Smart Cities Challenge – Letter of Support**

[REDACTED] was very interested to hear about the South Island Prosperity Project presented to the Smart Cities Challenge projects for Infrastructure Canada.

The focus on targeted Mobility as a Service implementations within a strong ecosystem is strongly aligned to our own approach. The engagement with technical, service and user organisations around a smart cities platform which is scalable and inclusive is of great interest to us.

[REDACTED]

It is vital that we are engaged with you, and other similar emerging initiatives, so we can share learnings as you move forward with this important project.

We look forward to being part of your ecosystem.

With best regards

[REDACTED]

[REDACTED]

Smart Cities Challenge Program Jury  
Ministry of Infrastructure and Communities  
180 Kent Street  
Suite 1100  
Ottawa, Ontario K1P 0B6  
18 February 2019  
**RE: Smart South Island "Smart Mobility" Proposal**

Dear Canada's Smart Cities Challenge Jury,

We are excited for the work that the South Island Prosperity Project (SIPP) and its collaborators are achieving in the delivery of the Smart Cities Challenge projects. Like most attractive and economically-successful urban regions, Greater Victoria faces a variety of transportation problems, including traffic congestion, traffic crashes, high infrastructure costs, pollution emissions, unaffordable consumer costs, and inadequate mobility options for non-drivers. We believe that the SIPP can provide innovative and effective solutions. We therefore support the SIPP in their application and look forward to collaborating throughout implementation.

Best regards,



[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)

March 4, 2019

To Whom It May Concern:


RE: Smart South Island "Smart Mobility" Proposal

[REDACTED] is excited to partner with the South Island Prosperity Project (SIPP) in the delivery of its Smart Cities Challenge projects.

Safe, vibrant, healthy communities are our shared vision. [REDACTED]  
[REDACTED]


[REDACTED] we know that safe, reliable, effective, and green transportation is an important issue in the Greater Victoria Region. As such, we see high value in the initiatives the SIPP is undertaking as part of their Smart Cities proposal. We support SIPP in their application and look forward to collaborating throughout implementation and helping build our safer, vibrant and healthier Greater Victoria.

Yours truly,  
[REDACTED]



ATIA - 13(1)(d)

ATIA - 19(1)



February 26 2019

Dear Canada's Smart Cities Challenge Jury,

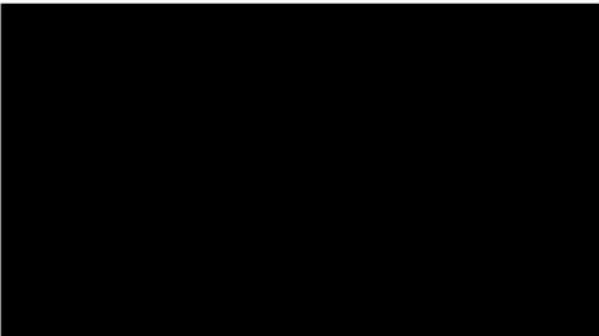
**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project (SIPP) and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects.

SIPP has demonstrated an outstanding ability to convene and engage key stakeholders in the Capital Regional District to address systemic challenges in our community. We are confident that their strategic integrated approach for the Smart South Island project will achieve outcomes that are strongly aligned with community needs and impactful for the diverse spectrum of stakeholders across the CRD. Greater Victoria is at a pivotal time to make the right choices to create a transportation solution that will foster a greater quality of life for it's rapidly growing population, and the SIPP will be the best organization to guide this work for our region.

As a major stakeholder in Greater Victoria, we know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Best regards,



[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)

February 26th, 2019

RE: Smart South Island "Smart Mobility" Proposal

Dear Canada's Smart Cities Challenge Jury,

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects.

As a key stakeholder in the Greater Victoria region [REDACTED]  
[REDACTED], we know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Best regards,

[REDACTED]

[REDACTED]

ATIA - 13(1)(d)

ATIA - 19(1)

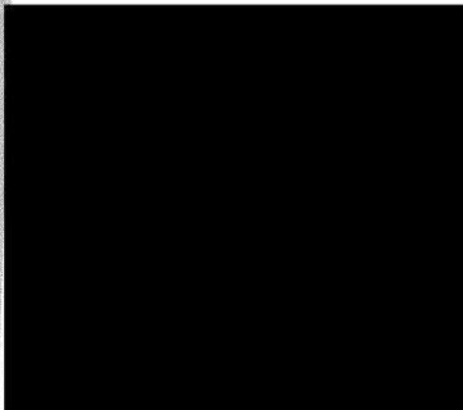
February 21, 2019

Dear Canada's Smart Cities Challenge Jury,


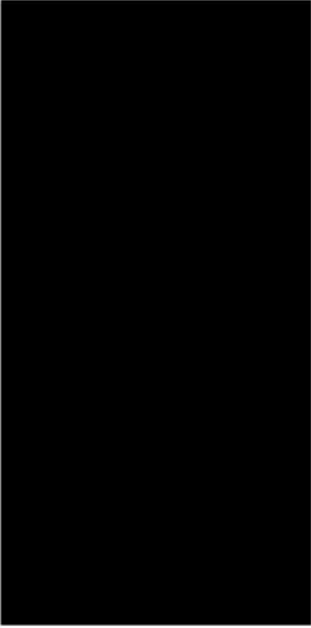
**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a major stakeholder in Greater Victoria, we know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Best regards,







February 21, 2019

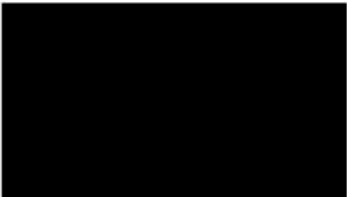
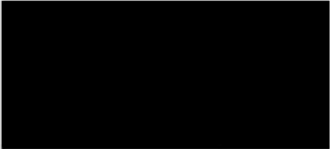
Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects. When it comes to urban mobility, factors such as traffic flow and infrastructure investment often supersede considerations about wellbeing, yet urban mobility is a key aspect of overall health and wellbeing outcomes in urban regions. Combining our lens of urban design with SIPP's expertise in building communities with economic and social prosperity has allowed us to deliver a project that we believe has the potential for a significant, positive impact in Greater Victoria. We believe that the smartest projects are those that apply innovative and unique solutions to improve the lives of current and future residents. We believe that SIPP's Smart Cities proposal achieves this.

We look forward to working with South Island Prosperity Project to improve mobility in Greater Victoria.

Best regards,



ATIA - 13(1)(d)


ATIA - 19(1)



February 28, 2019

Dear Canada's Smart Cities Challenge Jury,


RE: Smart South Island "Smart Mobility" Proposal

 we are working closely with the tech community on Vancouver Island. We are excited about the idea of providing better infrastructure to attract talents who are looking for a good living in a naturally beautiful setting. Smart Mobility initiative by SIPP is comprehensive support in our efforts to attract more tech talent to work at Vancouver Island.

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a significant stakeholder in Greater Victoria, we know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Best regards,





February 28, 2019

ATIA - 13(1)(d)


ATIA - 19(1)

Dear Canada's Smart Cities Challenge Jury,

RE: Smart South Island "Smart Mobility" Proposal

We are excited to collaborate with the South Island Prosperity Project (SIPP) in the delivery of its Smart Cities Challenge projects. As key stakeholders in the safety of citizens of the Greater Victoria region, we know that transportation is an important issue.

We see high value in the initiative's SIPP is undertaking as part of their Smart Cities proposal and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.




February 25<sup>th</sup>, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects to support a multimodal mobility system, through digital integration, that enables South Island residents to freely move around the region.



We have outlined in the attached form our investments and support related to Greater Victoria's Challenge application. We look forward to working with South Island Prosperity Project to improve mobility in Greater Victoria.

Best,





February 25, 2019


**RE: Smart South Island "Smart Mobility" Proposal**

Dear Canada's Smart Cities Challenge Jury,

[REDACTED] is excited for the work the South Island Prosperity Project and all of its collaborators in the delivery of the Smart Cities Challenge projects.

As a key stakeholder in the Greater Victoria region, we know transportation is a major issue, and we commit to supporting SIPP in their application. We look forward to collaborating throughout the implementation process.

Best regards,




February 27, 2019


Dear Canada's Smart Cities Challenge Jury,

RE: Smart South Island "Smart Mobility" Proposal

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a key stakeholder in the Greater Victoria region, we know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Kind regards,






ATIA - 13(1)(d)


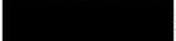
ATIA - 19(1)

**February 26, 2019**


Dear Canada's Smart Cities Challenge Jury,


**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. 

 we know that there are intricacies when dealing with innovation through the use of data and technology. However, we believe that SIPP is taking the right approach to managing  and we commit to supporting SIPP in their application and look forward to potential collaboration throughout implementation.

Best regards,





ATIA - 19(1)

ATIA - 13(1)(d)

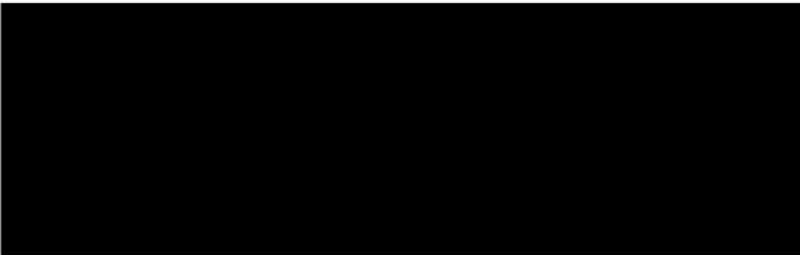
February 13, 2019

Dear Canada's Smart Cities Challenge Jury,

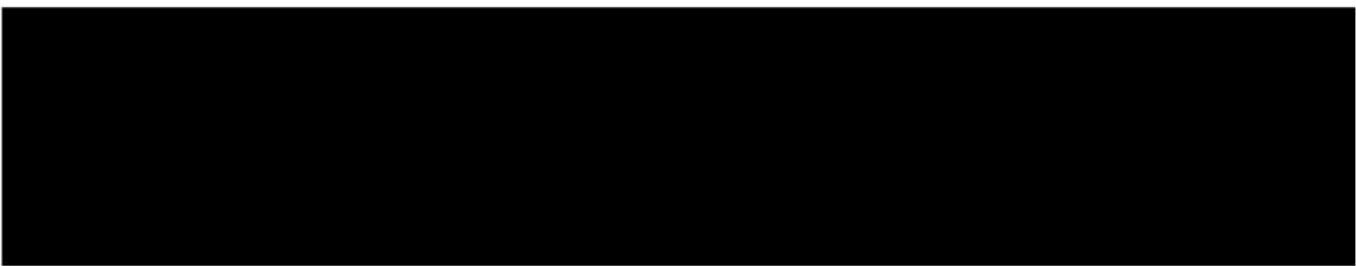
**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a major stakeholder in Greater Victoria, we know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Best regards,







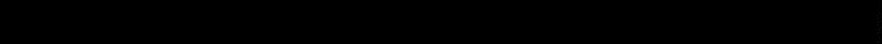
ATIA - 19(1)

February 26, 2019

ATIA - 13(1)(d)

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

 are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a key stakeholder in the Greater Victoria region, we know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation. The \$10 Million prize for the creation of transportation innovation would be a tremendous boost to our area.

Best regards,






ATIA - 19(1)

ATIA - 13(1)(d)

PROSPERITY  
PROJECT

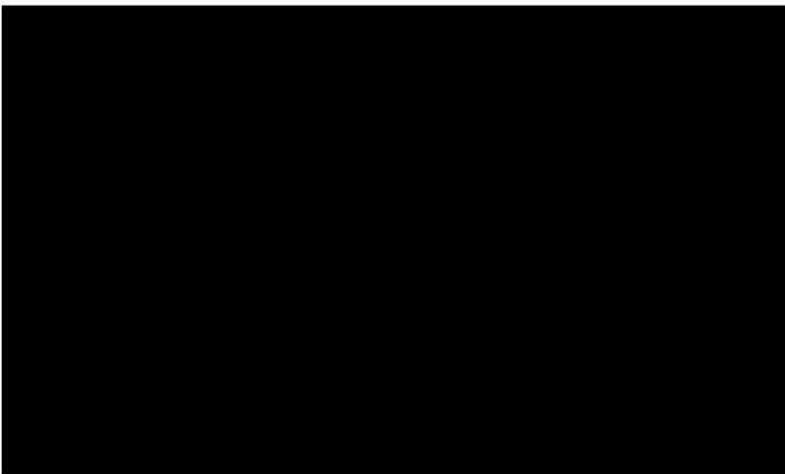
Dear Canada's Smart Cities Challenge Jury,

RE: Smart South Island "Smart Mobility" Proposal

  
We fully support the work South Island Prosperity Project and all their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a major stakeholder in Greater Victoria, we know that transportation is a major issue for our Business and our Clients.

We commit to supporting SIPP in their application and look forward to collaborating throughout implementation to achieve mobility solutions that will enhance our Region.

Best Regards,



February 26, 2019

Dear Canada's Smart Cities Challenge Jury,

RE: Smart South Island "Smart Mobility" Proposal

[REDACTED] I am writing to express our support for the Smart Cities Challenge projects being spearheaded by the South Island Prosperity Project (SIPP) and other collaborating organizations. As a major stakeholder in Greater Victoria, we know that transportation is a major issue and we are very supportive of SIPP's efforts to improve the regional transportation network.

[REDACTED]

Our team members frequently travel within the South Island region and to and from other areas of Vancouver Island, the Lower Mainland and across Canada to attend internal meetings, client meetings and various business conferences and events. For example, in my role I frequently travel between Victoria and Nanaimo and have firsthand experience dealing with the heavy traffic congestion during the morning and afternoon commutes – affectionately referred to by locals as the "Colwood Crawl." As the population of the South Island region continues to grow, so too does traffic congestion in the South Island region, which contributes to a host of negative economic, social and environmental impacts to our communities.

In addition to the direct impact on our team members, the efficacy of our transportation network also has equally broad impacts on our clients. These include tangible economic costs, such as the ability to deliver good and services in a timely and cost-effective manner, as well as social and environmental impacts on employees' overall quality of life. Given our success as a business is intrinsically linked to the success of our clients, this is another reason why we support SIPP's Smart Mobility proposal.

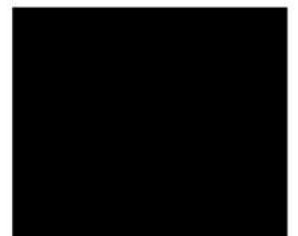
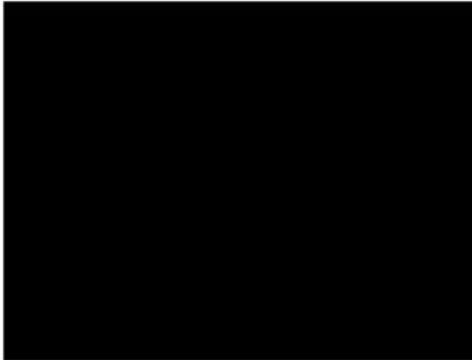
The transportation network in the South Island region is a tremendously complex system. Effectively dealing with the challenges and constraints within the system will require a long-term, data-driven approach and a major collaborative effort from local stakeholders and citizens. This is exactly the type of approach that SIPP has proposed.

ATIA - 19(1)

ATIA - 13(1)(d)

We are thankful for SIPP's leadership in addressing this critical issue in our community and I am pleased to express our support for their application. We look forward to collaborating with SIPP and other stakeholders throughout the project's implementation to bring about positive change for our region.

Your truly,







ATIA - 19(1)

ATIA - 13(1)(d)

March 4, 2019

Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects. Microsoft is deeply engaged throughout Western Canada and have multiple ongoing initiatives throughout the region which both align and enable the Smart South Island proposal. We look forward to working closely with South Island Prosperity Project teams to improve mobility in Greater Victoria.

Best regards,





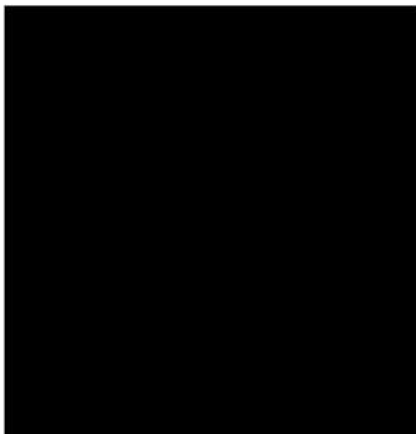
**February 28, 2019**

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a key stakeholder in the Greater Victoria transportation landscape, we know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Best regards,





February 25, 2019

Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a key stakeholder in the Greater Victoria region, we know that transportation is a major issue and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Sincerely,



[REDACTED]

28 February 2019

South Island Prosperity Project  
901 – 747 Fort St,  
Victoria, BC, V8W 3E9

ATIA - 13(1)(d)

ATIA - 19(1)

**Re: Letter of Support for the Smart Cities Project.**


Dear Canada's Smart Cities Challenge Jury,

[REDACTED]  
[REDACTED] I have had the pleasure of working with the South Island Prosperity Project and the Victoria municipal government and am in full support of the plans for modernizing our transportation infrastructure and look forward to continuing to collaborate on this and other projects that further the health, prosperity, and well-being of everyone in our community.

Regards,

[REDACTED]






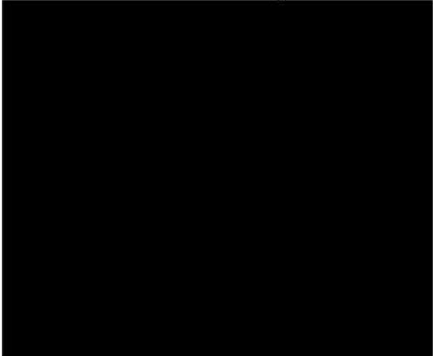
February 24, 2019

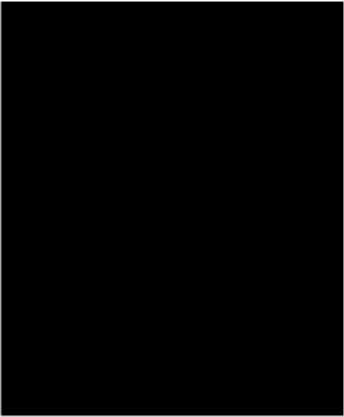
Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**


 excited about the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As growing business, and major stakeholder in Greater Victoria, we recognize improving transportation is a major issue for our business success and our employee's quality of life. Recognizing the need for improvement through innovation we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

Best regards,





ATIA - 19(1)



ATIA - 13(1)(d)


February 28, 2019


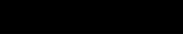
South Island Prosperity Project  
901 – 747 Fort Street  
Victoria BC V8W 3E9

To Whom It May Concern,

**RE: SMART SOUTH ISLAND "SMART MOBILITY" PROPOSAL**

I am writing this letter in support of the Smart Cities Challenge South Island Prosperity Project application by Greater Victoria to obtain funding in support a multimodal mobility system through digital integration.

We are excited to partner with the South Island Prosperity Project (SIPP) in the delivery of its Smart Cities Challenge projects. As key stakeholders in the safety of citizens in Greater Victoria, 

 we know that transportation is an important issue.  see high value in the initiatives SIPP is undertaking as part of their Smart Cities proposal and we commit to supporting SIPP in their application and look forward to collaborating throughout implementation.

I hope that this application will be successful and we look forward to making this project a success in our region.

Yours truly,



[REDACTED]

February 27, 2019

ATIA - 13(1)(d)

ATIA - 19(1)

Dear Canada's Smart Cities Challenge Jury,

Re: Smart South Island "Smart Mobility" Proposal


We are excited to partner with the South Island Prosperity Project in the delivery of its Smart Cities Challenge projects. Through various lenses, we see significant benefit to our organization and our region, as a result of this proposal.

- [REDACTED] Owing to our rural location, most of our employees are forced to use single occupancy vehicles to get to/from work. We welcome the chance to explore innovative mobility solutions that help to improve the economy, effectivity and sustainability of their daily commutes.
- [REDACTED]

Thank you for your consideration of this letter of support, as we look forward to working with South Island Prosperity Project to improve mobility in Greater Victoria.

Sincerely, [REDACTED]

[REDACTED]



February 15, 2019

ATIA - 19(1)

ATIA - 13(1)(d)


Dear Canada's Smart Cities Challenge Jury,

**RE: Smart South Island "Smart Mobility" Proposal**

We are excited for the work South Island Prosperity Project and all of their collaborators are achieving in the delivery of the Smart Cities Challenge projects. As a key stakeholder in the Greater Victoria region with [REDACTED] team members living in Greater Victoria, transportation is a critical issue.

The Project represents a vibrant group of stakeholders of which we are proud to be part of, and represent a significant opportunity to advance a common agenda to address this issue. We encourage all support to this combined effort.

Best regards,





## Greater Victoria Smart Cities Challenge Video Transcript

Greater Victoria is Canada's 15th largest metro-region. Like any growing city, we have transportation challenges.

But as a region with 13 urban and rural municipalities, plus 10 First Nation, our challenges go far beyond just traffic and congestion.

The way we move around our communities impacts our everyday lives. It impacts the jobs we have, the places we can afford to live, the services we can access, and how we can spend our time. It impacts our health and life satisfaction.

Imagine a young indigenous student having to hitchhike in order to attend classes.

Or a senior living in isolation because she can no longer drive and can only afford to use a taxi once a week for groceries, errands and doctors' appointments.

Mobility matters. Mobility is personal.

We believe all Canadians should have access to the freedom of mobility. .

Our Smart Mobility solution will ensure that all residents will live with the physical and emotional wellbeing that comes with it!

But this is a bold plan. To date, no city has been able to fully address this.

Greater Victoria was a fragmented region with 23 governments representing 380,000 people.

Three years ago, the South Island Prosperity Partnership, or SIPP, was formed.

SIPP is a collaboration of municipal and First Nations governments, post-secondary institutions, seven industry associations and non-profits, and 23 major employers.

Our region is now united behind a common cause and vision.

Since complex problems require working together, collaboration is the ONLY way forward. It's our driving force.

Bringing together those like-minded, smart creative minds, all the advocacy groups we need in order to advocate for that strong regional growth is what's going to help us succeed in achieving that sustainable and smart South Island.

Working together towards a shared goal magnifies and amplifies the impact of what we do and none of us could do it without partners.

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1

Several industry and academic roundtable meetings led to the formation of a new initiative called "Smart South Island". We created a steering committee. Next came the partners committee made up of municipal, First Nations and non-profit leaders.

A citizen survey by the Victoria Foundation sorted the region's top challenges into five key challenge themes. Next came a large public symposium to learn more from local residents about their challenges and how a Smart Cities approach could help.

Together, we crafted Vision 2040, a regional roadmap to guide how we can use technology and data to improve our well-being across those five challenge theme areas.

Urban activist Jane Jacobs said, "Cities have the capability of providing something for everybody, only because, and only when, they are created by everyone."

Residents young and old from a range of ethnic and cultural backgrounds and disability support networks told us that transportation and mobility was the place to start.

Local governments, nonprofits, and large employers in the region agreed that this was the top issue.

The Solution is an integrated, convenient, data-driven multimodal system that is affordable, sustainable, efficient, effective, inclusive, and safe.

To measure the impact of our solution, we've developed the world's first Mobility Wellness Index to help us understand the link between mobility and human wellbeing.

This is where our co-design framework comes in.

Our Smart Mobility solution starts with three groups: Indigenous youth and students, isolated seniors, and new immigrants to the region. Over the next three years, we will apply what we learned to help more segments of the population.

Our co design method has already been tested through 2 Innovation Challenge competitions. Citizens were asked to submit real project proposals designed to address the five theme areas. Through these public competitions, we received projects from local residents, non-profits , students and entrepreneurs. The best ideas were rewarded with cash prizes to make their projects a reality.

We complemented these deep engagement processes with other activities to build awareness, consult the public, and collaborate.

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2

We staged a Mobility Expo connecting the public to over 25 mobility service and product providers.

We convened a roundtable of transportation leaders and businesses operating in Greater Victoria.

We launched the Smart Mobility #FreedomtoMove Campaign which has achieved 950,000 public impressions through posters, radio, TV and bus ads.

We hosted several pop-up polls through our Youth Engagement Taskforce.

We are proud to be working with our First Nation communities on the Indigenous Smart Mobility Pilot, an “on demand” micro-transit pilot project to help improve very poor access to mobility services.

You know, we realize the importance here of working with our neighbours and all in our region here. You know, so that’s what it really is to us is to be able to have a seat at the table and share in those discussions.

Developing Smart Mobility is going to be incredibly beneficial to our community.

We have achieved immense traction in a short period of time and momentum is growing.

There is a desire and a collective belief that this is not just going to be a shelf project. We are going to do something

Yeah, we’re starting from a position of strength.

Go SIPP go!

We’re a smart community!

*(cheering and clapping)*

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March 5, 2019

Jacques van Campen  
Director of Innovation  
South Island Prosperity Project  
#901 – 747 Fort Street  
VICTORIA BC V8W 3E9

Dear Jacques van Campen:

**Re: Privacy Impact Assessment  
City of Victoria / South Island Prosperity Project  
OIPC File F18-76391**

This letter is regarding the project proposal by the City of Victoria (the City) for the Smart Cities Challenge conducted by Infrastructure Canada. The letter reviews the proposals described in the preliminary privacy impact assessment (PIA), and the draft data and security and technology chapters of the Smart Cities submission. I provide this comment for consideration in future assessments. Please note that my comments do not fetter the Commissioner's discretion should your initiative later be subject to a complaint or investigation.<sup>1</sup>

It is our understanding that the owner of this project is the South Island Prosperity Project (SIPP), a private sector organization, and not the City of Victoria. SIPP has engaged with our office throughout its development process. The PIA submitted to our office outlines the projects that SIPP proposes to deploy if it is a successful Smart Cities proponent.

I am satisfied that SIPP is considering the legal privacy requirements for private sector organizations under British Columbia's *Personal Information Protection Act* (PIPA). SIPP has agreed to complete comprehensive privacy impact assessments on each component of its initiative if successful. Our office is willing to offer continued assistance in the future.

I have separated the following comments by the proposed components in the PIA, as well as the draft data and security chapter and technology chapters of SIPP's Smart Cities submission.

### **Legal context**

Based on the information provided, I understand that SIPP will have custody and control of the data collected in the proposed projects.

British Columbia is one of three provinces with its own private sector privacy legislation. The legislation in each of these provinces is substantially similar to the federal *Personal Information Protection and Electronic Documents Act* (PIPEDA). PIPA applies to organizations in BC, unless a private organization is engaged in a federal work or undertaking, such as a bank or

<sup>1</sup> For more information, please read our policy on consultations, available at:  
<https://www.oipc.bc.ca/guidance-documents/1432>.



airline (in which case PIPEDA would apply). Unlike PIPEDA, PIPA applies to non-profit organizations, such as SIPP.

PIPA relies on the two overarching concepts of reasonableness and consent. So long as the information sought is what a reasonable person would consider appropriate for the purpose, and the individual consents to the collection, use, and/or disclosure of their personal information, PIPA authorizes organizations to collect and use that personal information.

The two key components of express consent are that the organization must provide the individual with sufficient notice so that they have clear understanding of what they are consenting to, and organizations must not require consent beyond what is necessary to provide a product or service.

PIPA also lists a number of circumstances when an organization can collect, use, and disclose personal information without consent.

### **1. Mobility-as-a-Service and Smart Trip Planning**

SIPP intends to offer Greater Victoria's citizens a single-location platform called 'mobility-as-a-service' (MaaS) that would allow individuals to plan their transportation around the local region. MaaS would also allow individuals to create an account, book transportation options, such as taxis, and pay. Individuals would have their routes tracked via GPS and aggregated to a neighbourhood level as a tool to improve the service.

As consent is required in order for SIPP to collect personal information, SIPP will need to inform individuals of the specific uses for their information in a simple, succinct, and prominent manner.

Further, SIPP must be cautious that they do not require the individual to provide more information than is necessary to provide the product or service. For example, while it may be reasonable for SIPP to collect an individual's payment information to make the payment process more efficient, this information is not necessary to offer a service that informs the individual of their transportation options from A to B.

### **2. Data Management**

The data management component of SIPP's proposal would integrate datasets from a variety of public and private sources for trip planning and payment with the MaaS and for analysis and visualization of individuals in transit across the region. SIPP also proposes combining this third-party data with aggregated data on mode choice and user feedback. The intent is to feed this data into the Smart South Island Inspiration Centre.

Based on the types of data sought in the table under "Data and Privacy Plan" in Chapter 7 of the final proposal, the majority of the information does not appear to be personal information. However, some of the proposed integration systems, such as the City's booking and payment platform, may present a challenge for compliance with BC's privacy laws. This integration will require authority for collection, use, and disclosure of personal information in PIPA and in our public sector privacy statute, the *Freedom of Information and Protection of Privacy Act*. SIPP will need to determine how the law authorizes the City and SIPP to share personal information related to these transactions.

### 3. Smart South Island Inspiration Centre

Using the information identified in the data management component, SIPP proposes creating the Smart South Island Inspiration Centre (Inspiration Centre) as a location where citizens can engage with the data to design community proposals and solutions to their transportation needs. SIPP's Data and Privacy Plan states that the data would be stored and transmitted with effective cybersecurity controls, while the data itself is publically-sourced and community-owned. Finally, its proposal commits to minimizing the volume of data and ensuring its de-identification.

Depending on the quantity of data involved, adequate de-identification of personal information may be a challenge. The more information that SIPP combines, the more likely it is that the information could be re-identified, especially if the data is shared with partners and the public.

The proposal also states that personal information collected, used, and disclosed will have "transparent consent." While not described in PIPA, "transparent consent" likely aligns with PIPA's requirement for clear notice of purpose(s) for the collection, use, and disclosure of personal information. SIPP should ensure it can provide individuals with a simple, succinct, and prominent notification of how the Inspiration Centre could use the individual's personal information. Further, as the Inspiration Centre is not necessary for delivering MaaS, as part of its consent, SIPP should consider allowing individuals to opt-out of having their information aggregated into the Inspiration Centre dataset.

### Conclusion

SIPP has clearly indicated a commitment to implementing privacy in the design of projects, creating governance and privacy management programs, and continuing to engage with this office.

Therefore, I am satisfied with SIPP's commitment to making privacy a core pillar of their smart cities projects.

If you have any questions, please contact me directly by telephone at [REDACTED] or by email at [REDACTED]@oipc.bc.ca.

Sincerely,

[REDACTED]  
Christopher Gillespie  
Policy Analyst

cc: Mike Palmer, Chief Information Officer, City of Victoria  
Bradley Weldon, Director of Policy, BC OIPC



# Privacy Impact Assessment for Non-Ministry Public Bodies

## Smart South Island

PIA#[assigned by your privacy office(r)]

### Why do I need to do a PIA?

Section 69(5.3) of the *Freedom of Information and Protection of Privacy Act* (FOIPPA) requires the head of a public body to conduct a privacy impact assessment (PIA) in accordance with the directions of the minister responsible for FOIPPA. Public bodies should contact the privacy office(r) for their public body to determine internal policies for review and sign-off of the PIA. Public bodies may submit PIAs to the Office of the Information and Privacy Commissioner for BC (OIPC) for review and comment.

If you have any questions about this PIA template or FOIPPA generally, you may contact the Office of the Chief Information Officer (OCIO) at the Privacy and Access Helpline (250 356-1851). Please see our [HYPERLINK "http://www.cio.gov.bc.ca/cio/priv\\_leg/foippa/pia/pia\\_index.page?"](http://www.cio.gov.bc.ca/cio/priv_leg/foippa/pia/pia_index.page?) [PIA Guidelines](#) for question-specific guidance on

### What if my initiative does not include personal information?

Public bodies still need to complete Part 1 of the PIA and submit it along with the signatures pages to their privacy office(r) even if it is thought that no personal information is involved. This ensures that the initiative has been accurately assessed.

## Part 1 – General

Name of Department/Branch:	South Island Prosperity Partnership		
PIA Drafter:	Jacques van Campen		
Email:	jvancampen@southislandprosperity.ca	Phone:	
Program Manager:	Emilie de Rosenroll		
Email:	ederosenroll@southislandprosperity.ca	Phone:	

***In the following questions, delete the descriptive text and replace it with your own.***

### 1. Description of the Initiative

This initiative is part of the Smart Cities Challenge. Through the Challenge, SIPP is proposing the development of an integrated mobility-as-a-service (MaaS) application, and a smart trip planning and universal payment platform that can be used by individuals to plan, book, and pay for a trip across multiple transport operators (e.g. BC Transit, U-Bicycle, MODO). The result of this initiative will be to make multimodal options (e.g. transit, cycling, and walking) more convenient and integrated. The outcomes related to this work include making transportation in Greater Victoria more convenient, affordable, green, and inclusive.



# Privacy Impact Assessment for Non-Ministry Public Bodies

## *Smart South Island*

PIA#[assigned by your privacy office(r)]

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### 2. Scope of this PIA

The scope of this preliminary PIA includes the integrated mobility-as-a-service (MaaS) application, and a smart trip planning and universal payment platform including the co-design, and development of the pilot applications.

### 3. Related Privacy Impact Assessments

There are no other PIAs previously completed for this initiative.

### 4. Elements of Information or Data

The following sets of personal data will be involved in this initiative. Examples are provided below.

Data	Examples	How is this collected?
Name	First + last name	When the user signs up for a MaaS account
Credentials	Username + password	When the user signs up for a MaaS account
Contact Information	Email address, Phone number	When the user signs up for a MaaS account
Demographic Information	Age, user group, Preferences	When the user signs up for a MaaS account
Location	Trip origin + destination, and route	Through the app interface when a trip is booked, and via GPS during the duration of the trip
Mode Choice	Transit versus other options	Through the app interface when a trip is booked
Payment Data	Debit/ credit card, or banking information	When the user wishes to pay for a trip using the MaaS account
User Feedback	Trip satisfaction, stated wellbeing	Through the app interface during or following a trip





# Privacy Impact Assessment for Non-Ministry Public Bodies

## *Smart South Island*

PIA#[assigned by your privacy office(r)]

If personal information is involved in your initiative, please continue to the next page to complete your PIA.

If no personal information is involved, please submit Parts 1, 6, and 7 to your privacy office(r). They will guide you through the completion of your PIA.

### **Part 2 – Protection of Personal Information**

*In the following questions, delete the descriptive text and replace it with your own.*

#### **5. Storage or Access outside Canada**

At this time, we have not selected a technology or platform vendor for data storage, and are unable to state whether the data will be stored and accessible only within Canada.

#### **6. Data-linking Initiative\***

In FOIPPA, "data linking" and "data-linking initiative" are strictly defined. Answer the following questions to determine whether your initiative qualifies as a "data-linking initiative" under the Act. If you answer "yes" to all 3 questions, your initiative may be a data linking initiative and you must comply with specific requirements under the Act related to data-linking initiatives.

1. Personal information from one database is linked or combined with personal information from another database;	no
2. The purpose for the linkage is different from those for which the personal information in each database was originally obtained or compiled;	no
3. The data linking is occurring between either (1) two or more public bodies or (2) one or more public bodies and one or more agencies.	no
If you have answered "yes" to all three questions, please contact your privacy office(r) to discuss the requirements of a data-linking initiative.	



# Privacy Impact Assessment for Non-Ministry Public Bodies

## Smart South Island

PIA#[assigned by your privacy office(r)]

### 7. Common or Integrated Program or Activity\*

<b>In FOIPPA, “common or integrated program or activity” is strictly defined. Answer the following questions to determine whether your initiative qualifies as “a common or integrated program or activity” under the Act. If you answer “yes” to all 3 of these questions, you must comply with requirements under the Act for common or integrated programs and activities.</b>	
1. This initiative involves a program or activity that provides a service (or services);	yes
2. Those services are provided through: (a) a public body and at least one other public body or agency working collaboratively to provide that service; or (b) one public body working on behalf of one or more other public bodies or agencies;	no
3. The common or integrated program/activity is confirmed by written documentation that meets the requirements set out in the FOIPP regulation.	no
<b>Please check this box if this program involves a common or integrated program or activity based on your answers to the three questions above.</b>	

***\* Please note: If your initiative involves a “data-linking initiative” or a “common or integrated program or activity”, advanced notification and consultation on this PIA must take place with the Office of the Information and Privacy Commissioner (OIPC). Contact your public body’s privacy office(r) to determine how to proceed with this notification and consultation.***

***For future reference, public bodies are required to notify the OIPC of a “data-linking initiative” or a “common or integrated program or activity” in the early stages of developing the initiative, program or activity. Contact your public body’s privacy office(r) to determine how to proceed with this notification.***



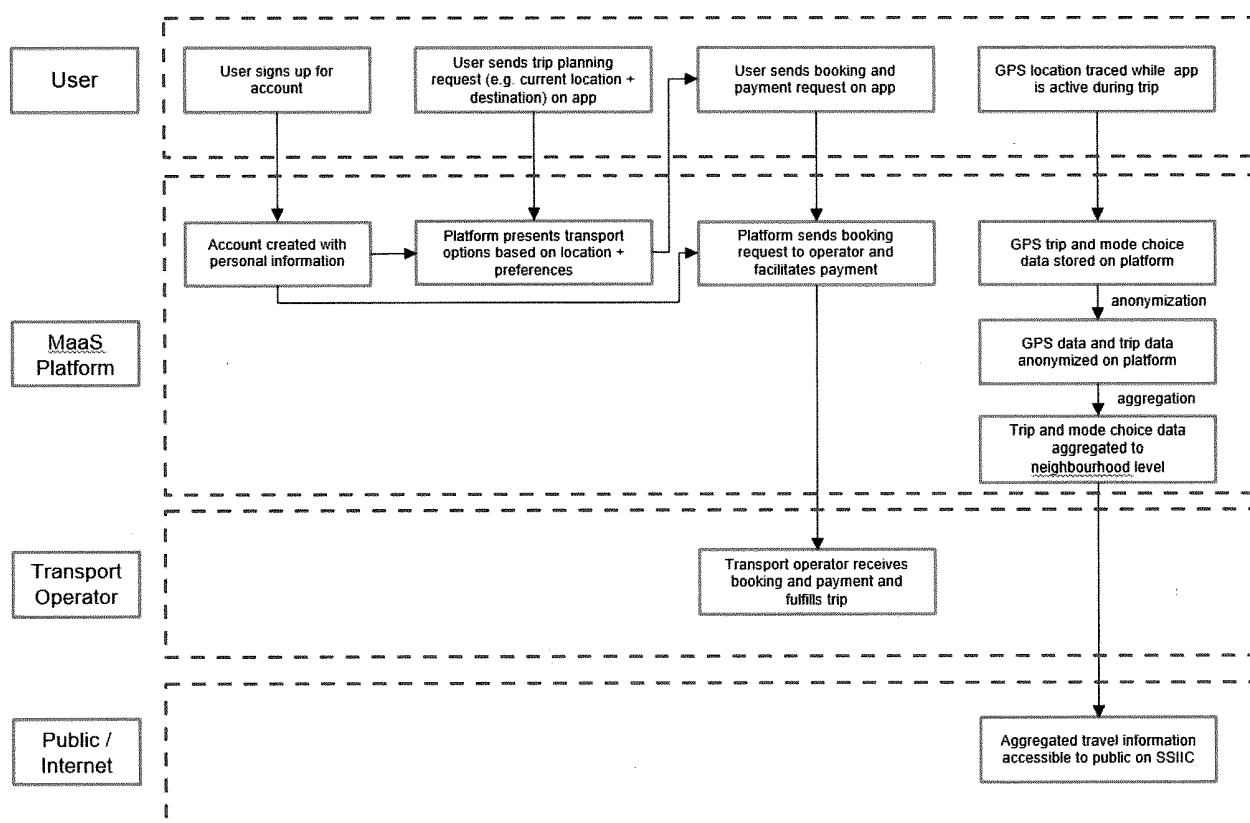
# Privacy Impact Assessment for Non-Ministry Public Bodies

## Smart South Island

PIA#[assigned by your privacy office(r)]

### 8. Personal Information Flow Diagram and/or Personal Information Flow Table

#### Flow of Personal Information





# Privacy Impact Assessment for Non-Ministry Public Bodies

## *Smart South Island*

PIA#[assigned by your privacy office(r)]

Personal Information Flow Table			
	Description/Purpose	Type	PIPA Authority
1.	User signs up for account	Collection	Section6 (Consent)
2.	User sends trip planning request	Collection	Section6 (Consent)
3.	Platform presents to user transport options based on location and preferences	Disclosure & Use	Section6 (Consent)
4.	User sends booking and payment request on app	Collection	Section6 (Consent)
5.	Platform sends booking request to operator and facilitates payment	Disclosure & Use	Section6 (Consent)
6.	Transport operator receives payment and fulfills trip	Use	Section6 (Consent)
7.	GPS location is traced while app is active during trip	Collection	Section6 (Consent)
8.	GPS trip and mode choice anonymized on platform	Use	Section6 (Consent)
9.	GPS data and trip data aggregated to neighbourhood level	Use	Section6 (Consent)
10.	Aggregated data and statistics shared with open data portal	Use	Section6 (Consent)





# Privacy Impact Assessment for Non-Ministry Public Bodies

## *Smart South Island*

PIA#[assigned by your privacy office(r)]

### 9. Risk Mitigation Table

Risk Mitigation Table			Likelihood	Impact
	Risk	Mitigation Strategy		
1.	Public concern or confusion over privacy issues	Prioritize transparency by presenting privacy policies and waivers in decipherable and comprehensive terms. Provide a specific email contact information for the designated data privacy officer.	Medium	Medium
2.	Vulnerability against breaches, damage as a result of potential data breach	Enforce data sharing partners (municipalities, industries, mobility service providers, etc.) to be compliant with the applicable regulation. The data trust will conduct thorough reviews of partner companies' cybersecurity policies, processes, procedures and readiness for robustness.	Medium	High
3.	Possible re-identification of data	Hiring of a third party company who is highly competent at anonymizing collected data and ensuring the anonymized data containing Personally Identifiable Information (PII)	Low	Medium
4.	Unauthorized access of collected PII data	Physical, administrative and technical safeguards implemented to minimize access to personal information. This includes the separate storage of data by classification into a tiered system. Access only provided to individuals as required for the identified purpose of delivering the services.	Medium	High

### 10. Collection Notice



# Privacy Impact Assessment for Non-Ministry Public Bodies

## Smart South Island

PIA#[assigned by your privacy office(r)]

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This proposed text will be shown when the User signs up for the MaaS (Mobility as a Service):

*We will collect and process your personal data for the purposes of providing the MaaS Services, namely:*

- *To provide tailored price calculations for the journey options returned during a journey plan request (over the phone or online)*
- *To book and fulfil (including payment processing) a journey selected if you request this*
- *To access your account data when you use the services online or over the phone*
- *To understand current travel patterns within Greater Victoria to enable future overall systems enhancements*
- *To contact you:*
  - o *To inform of any cancellations to a booked journey*
  - o *To invite to co-design sessions*
  - o *To invite to complete surveys for evaluation of the trial*
  - o *To inform of updates to terms and conditions or the privacy policy*

*We will collect, use and disclose this information only for the purposes stated above and in line with the Personal Information Protection Act. Should you have any questions, please contact our Data Privacy Officer.*

### **Part 3 – Security of Personal Information**

***If this PIA involves an information system, or if it is otherwise deemed necessary to do so, please consult with your public body's privacy office(r) and/or security personnel when filling out this section. They will also be able to tell you whether you will need to complete a separate security assessment for this initiative.***

**11. Please describe the physical security measures related to the initiative (if applicable).**

*Not applicable.*



# Privacy Impact Assessment for Non-Ministry Public Bodies

## *Smart South Island*

PIA#[assigned by your privacy office(r)]

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**12. Please describe the technical security measures related to the initiative (if applicable).**

- Partitioned environments for data storage;
  - Cloud storage, with regular aggregation of data that is no longer needed/has been requested by the user to be deleted, as overseen by data trust
- Structured data storage, based on the classification of data sensitivity;
  - Using multi-tiered data classification to separate the data as per function, i.e. separate personal data from GPS data (linking GPS data with unique IDs or tokens)
  - Restricting access to storage locations
  - Local machine encryption for tiers with higher information sensitivity access

**13. Does your branch/department rely on any security policies?**

- Secure password management (selection and maintenance).
- File and data management is restricted to only qualified individuals
- Overall system access is controlled by IT Manager on a per employee/contractor basis

**14. Please describe any access controls and/or ways in which you will limit or restrict unauthorized changes (such as additions or deletions) to personal information.**

- Apply robust data access permission roles. Using the least to know privilege
- Restrict data access to only the qualified and pre-cleared individuals through allowing access through individual verified analysts accounts, with multi-factor-authentication (MFA)
- Assigning data permissions roles (per tier, data type, etc.) to restrict access even further per analyst, i.e. restricting access of information for based on sensitivity and type; review individuals permissions roles regularly

**15. Please describe how you track who has access to the personal information.**

- Implement auditable data access, automated monitoring and alerting;
- Automated monitoring and alerting will inform of unauthorized data access
- Possible implementation of 24/7 response team to monitor suspicious account activity
- We will ensure we track both read and write accesses to any personal information



# Privacy Impact Assessment for Non-Ministry Public Bodies

## *Smart South Island*

PIA#[assigned by your privacy office(r)]

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### **Part 4 – Accuracy/Correction/Retention of Personal Information**

- 16. How is an individual's information updated or corrected? If information is not updated or corrected (for physical, procedural or other reasons) please explain how it will be annotated? If personal information will be disclosed to others, how will the public body notify them of the update, correction or annotation?**

Users will be allowed to edit and correct any personal information including name, contact information, and preferences within their MaaS account.

Users that wish to withdraw consent will have their individually identifiable information removed from the system.

- 17. Does your initiative use personal information to make decisions that directly affect an individual(s)? If yes, please explain.**

Yes, travel preferences and location information will be used to present relevant options to the user. Payment information will be used to facilitate booking and payment of the transport service.

- 18. If you answered "yes" to question 17, please explain the efforts that will be made to ensure that the personal information is accurate and complete.**

Users will be given the opportunity to confirm the origin and destination location for the trip, prior to booking. Users will also be given the opportunity to confirm their payment method. Users will be allowed to edit and correct any personal preferences within their MaaS account.

- 19. If you answered "yes" to question 17, do you have a records retention and/or disposition schedule that will ensure that personal information is kept for at least one year after it is used in making a decision directly affecting an individual?**

Account information will be retained until the end of the MaaS operator's provision of the services or until the user cancels their account (whichever comes first).





# Privacy Impact Assessment for Non-Ministry Public Bodies

## *Smart South Island*

PIA#[assigned by your privacy office(r)]

Location and travel information will be retained up to a year after the trip in disaggregate form. Aggregated trip data may be retained indefinitely beyond the one-year retention.

### **Part 5 – Further Information**

**20. Does the initiative involve systematic disclosures of personal information? If yes, please explain.**

*For example: your department has a regular exchange of personal information (both collection and disclosure) with the federal government in order to provide services to your clients.*

No.

***Please check this box if the related Information Sharing Agreement (ISA) is attached. If you require assistance completing an ISA, please contact your privacy office(r).***

☐

**21. Does the program involve access to personally identifiable information for research or statistical purposes? If yes, please explain.**

No. Personally identifiable information (including GPS locations and traces) will be anonymized and aggregated prior to sharing for analysis, research, and statistical purposes. Raw data will not be disclosed or shared.

***Please check this box if the related Research Agreement (RA) is attached. If you require assistance completing an RA please contact your privacy office(r).***

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**22. Will a personal information bank (PIB) result from this initiative? If yes, please list the legislatively required descriptors listed in section 69 (6) of FOIPPA. Under this same section, this information is required to be published in a public directory.**

No.



# Privacy Impact Assessment for Non-Ministry Public Bodies

## *Smart South Island*

PIA#[assigned by your privacy office(r)]

Please ensure Parts 6 and 7 are attached to your submitted PIA.

### **Part 6 – Privacy Office(r) Comments**

*This PIA is based on a review of the material provided to the Privacy Office(r) as of the date below. If, in future any substantive changes are made to the scope of this PIA, the public body will have to complete a PIA Update and submit it to Privacy Office(r).*

Privacy Officer/Privacy Office  
Representative

Signature

Date



# Privacy Impact Assessment for Non-Ministry Public Bodies

## *Smart South Island*

PIA#[assigned by your privacy office(r)]

### **Part 7 – Program Area Signatures**

_____ Program/Department Manager	_____ Signature	_____ Date
_____ Contact Responsible for Systems Maintenance and/or Security (Signature not required unless they have been involved in this PIA.)	_____ Signature	_____ Date
_____ Head of Public Body, or designate	_____ Signature	_____ Date

A final copy of this PIA (with all signatures) must be kept on record.

***If you have any questions, please contact your public body's privacy office(r) or call the OCIO's Privacy and Access Helpline at 250 356-1851.***

**Page(s) 246 to 255  
are withheld  
pursuant to paragraph  
13(1)(d), 13(1)(e) & 20(1)(b)  
of the *Access to Information Act***

**\*\*\*\***

**La/les page(s) 246 à 255  
Font l'objet d'une exception totale  
conformément aux dispositions de paragraphe  
13(1)(d), 13(1)(e) & 20(1)(b)  
de la *loi sur l'accès à l'information***